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SEDIMENT STATION ANALYSIS: SOUTH SASKATCHEWAN RIVER AT HIGHWAY No. 41 - 05AK001

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342AM

Sediment Station Analysis

South Saskatchewan River at Highway No. 41

05AK001

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Abstract

Water Survey of Canada has collected sediment data at the South Saskatchevan River at Highway No. 41 (05AK001) since April 1966. This sediment station was established primarily to quantify the sediment input to Lake Diefenbaker. The report was prepared to evaluate whether the sediment program has met this objective and if so whether sufficient sediment data are now available to adequately document the sediment transport characteristics at this site.

Until 1978 the data were collected year-round but since then the station has only been operated seasonally, April to October. Suspended sediment data are collected at a generally stable cross section in which the bed material is predominantly sand with some gravel present.

Most of the annual load is transported during the peak flows in June. The mean annual suspended sediment load was 3.2×10^6 for the 12-year period 1967 to 1978, a period when annual flows were above average.

Existing particle size data are sufficient to characterize the particle-size distribution of the suspended sediment. The particle size distribution is dominated by silts and clays. Sediment samples collected by the point-integrated method reveal that the concentration is consistent both vertically and laterally across the channel. Sand particles are distributed proportionately throughout each sampling panel.

Results of this station review indicate that further intensive sample collection will not improve our general knowledge of the sediment transport at this site. It is, therefore, recommended that the detailed sampling program be replaced by a miscellaneous program focusing on the range of discharges that have not yet been sampled.

A by-product of this study is the compilation of all available sediment data into one package and the presentation of various pertinent sediment data features in tabular and graphical formats. Thus the report will be a useful tool for engineers, geomorphologists and environmentalists working on projects on the South Saskatchevan River.

Résumé

Les Relevés hydrologiques du Canada recueillent depuis 1966 des données sur les sédiments à la station de jaugeage 05AK001 située sur la rivière Saskatchevan Sud à la hauteur de l'autoroute 41. Cette station a été établie principalement pour quantifier l'apport de sédiments au lac Diefenbaker. Le présent rapport a été rédigé afin d'évaluer si le programme d'étude des sediments avait permis d'atteindre cet objectif et, dans l'affirmative, s'il existe suffisamment de donner sur les sédiments pour documenter adéquatement les caractéristiques du transport des sédiments à cette station.

Jusqu'en 1978, les données étaient recueillies durant toute l'année; toutefois, la station est exploitée de façon saisonnière depuis, soit d'avril à octobre. Les données sur les sédiments en suspension sont recueillies à la section transversale généralement stable où les matériaux du lit qui s'y déposent sont principalement composés de sable parsemé d'un peu de gravier.

La plupart du transport annuel des sédiments s'effectue en juin au moment où l'on enregistre des débits de pointe. Le débit annuel moyen des sédiments en suspension est de $3,2 \times 10^6$ pour les 12 ans entre 1967 et 1978, alors que les débits annuels étaient supérieurs à la moyenne.

On dispose présentement de plus de données sur la granulométrie qu'il n'en faut pour caractériser la granulométrie des particules en suspension, laquelle est dominée par la charge de ruissellement. L'analyse des échantillons de sédiments prélevés par la méthode ponctuelle révèle que la concentration est uniforme tant verticalement que latéralement dans le canal. Les particules de sable sont réparties proportionnellement à la grandeur de chacune des sous-sections ou s'effectue l'échantillonnage.

Les résultats obtenus par la revue de cette station indiquent que des collectes supplémentaires et intensives d'échantillons n'amélioreront pas la connaissance globale du transport des sédiments à cet endroit. Il est donc recommandé de remplacer le programme d'échantillonnage détaillé par un programme diversifié s'attardant à la gamme de débits qui n'ont pas encore fait l'objet d'échantillonnage.

Un des produits secondaires de cette étude est la compilation en répertoire de toutes les données disponibles sur les sédiments et la présentation de diverses caractéristiques des données pertinentes sur les sédiments sous forme de tableaux et de graphiques. Le rapport sera donc utile aux ingénieurs, géomorphologues et [illegible]logistes qui exécutent des projets sur la rivière Saskatchevan Sud.

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1.0 Introduction

1.1 History and Purpose of the Sediment Program

Sediment data have been collected at the South Saskatchevan River at Highway No. 41 site since April 1966. The primary reason for establishing this station was, in conjunction with the station on the Red Deer River near Bindloss (05CK004), to replace the hydrometric station South Saskatchewan River near Lemsford (05HB001). The station at Lemsford station was operated during the period 1961 to 1970 and had been established to assess the quantity of sediments being discharged into Lake Diefenbaker to check reservoir life expectancy computations. The data from the two stations, Red Deer River near Bindloss and South Saskatchewan River at Highway No. 41 were deemed to be representative of reservoir sediment inflow and thus in 1970 the station at Lemsford was discontinued. Yuzyk (1983) evaluated the data and found that the combined loads of Bindloss and Highway No. 41 provided a strong correlation when compared to the monthly suspended sediment loads at Lemsford.

Since the sediment station has met its original engineering requirements of replacing the station South Saskatchevan River near Lemsford (05HB001) the sampling program has been discontinued on a continuing basis but is still sampled as a miscellaneous operation and sampled on each visit by the technician.

1.2 Purpose of Report

The purpose of this report is to present the available sediment data in concise and readily usable formats for application by clients in engineering and environmental disciplines. Basic sediment yield and channel characteristics are examined and interpreted. It is also an objective of this report to examine the data to determine whether sufficient data are available to meet most engineering application needs and to determine whether suspended sediment data can be generated, to a sufficient degree of accuracy, from streamflow discharge data.

1.3 Scope of Report

This report reviews the various types of sediment data collected since 1966. It includes a description of the hydrometric station and contains brief descriptions of the basin and its hydrology. The bulk of the report deals with the suspended sediment concentrations and discharges, detailing the program utilized in collecting the data, presenting the data in various graphical formats, and discussing the representativeness of the collected sediment data to long-term conditions. The suspended sediment transport regime is investigated and available particle-size information is presented.

A variety of figures and corresponding discussions on available hydraulic data are also contained in this report. Similarly, graphs of bed material and dissolved solids are presented and discussed.

This report is summarized with an evaluation of the program and makes recommendations as to required future levels of sediment data collection efforts at this site.

Appendices contain a variety of graphs and listings of the available data.

2.0 Background

2.1 Basin Description and Hydrology

With the exception of a very narrov strip in the extreme south, the South Saskatchevan River basin spreads over the southern one-eighth of the province of Alberta. The south-western tip of the basin is actually situated in Montana, U.S.A. The basin, with respect to the land mass of Alberta, is depicted in Figure 1. This figure also depicts major tributaries and population centres.

The South Saskatchevan River is formed by the junction of two major tributaries; the Bov and Oldman Rivers. The Bow River sub-basin accounts for 38% of the area of the basin, the Oldman River 42% and the South Saskatchevan River 20%. The total drainage area to the gauging station on the South Saskatchevan River at Highway No. 41 is 66 000 square kilometres.

The Bov and Oldman Rivers rise in the front ranges of the Rocky Mountains and its foothills. They flov eastvard into the prairies, approximately paralleling each other, with the Bov River floving east-southeasterly eventually merging with the Oldman River some 50 kilometres vest of Medicine Hat to form the South Saskatchevan River. The elevations of the basin range from 1 200 to 2 000 metres above mean sea level in the western portion, to 600 metres above sea level in the east. The western portion of the basin is vegetated by coniferous forests in the mountains and mixed forests and open grasslands in the foothills.

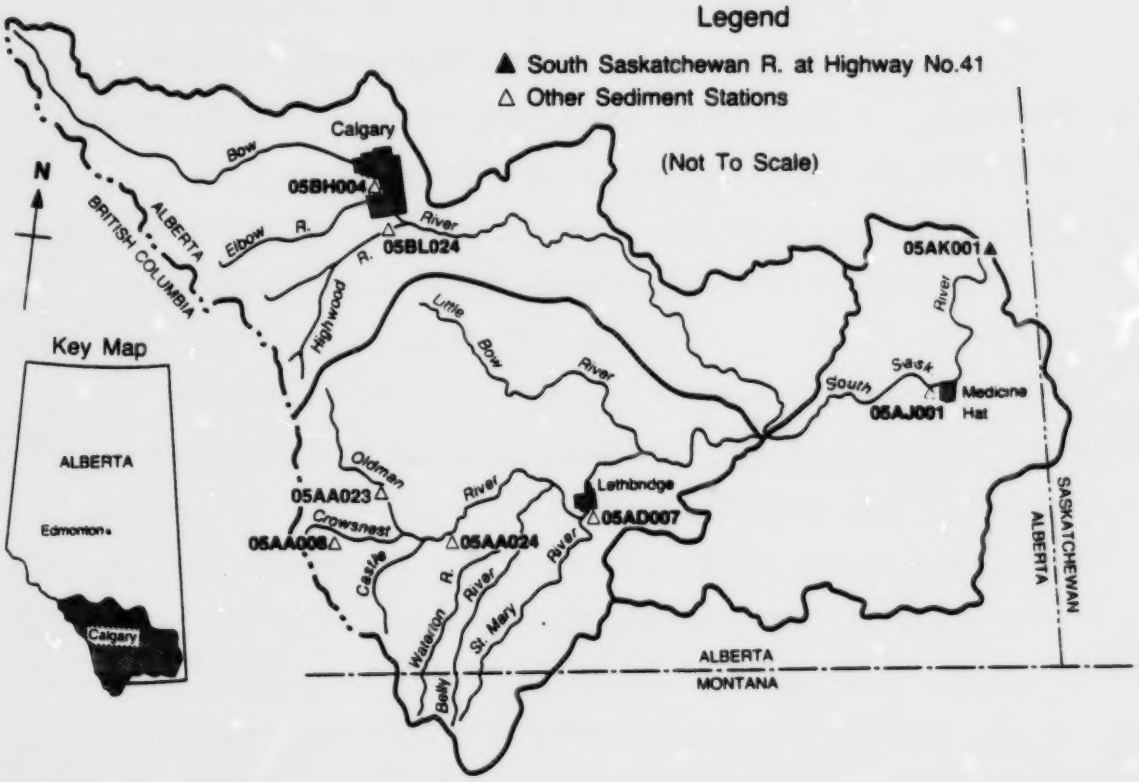

Figure 1. Location and drainage basin map for the South Saskatchewan River at Highway No.41 (05AK001) hydrometric station.

The majority of the basin is in the prairie region which is relatively flat and extensively cultivated.

In the mountains and foothills portion of the basin moderate amounts of mining and logging activities take place but the predominant commercial activity within the basin is agriculture. With much of the basin being situated in semi-arid prairie the use of the South Saskatchevan River waters for irrigation is extensive. In the Oldman River basin two on-stream major storage reservoirs exist with the construction of a third in progress. In the Bow River basin a number of on-stream storage reservoirs exist in the headwaters. These are used for power generation. In addition there are three major diversions directly from the river to internal off-stream storage reservoirs for later distribution within the irrigation districts. Similar off-stream reservoirs exist in the Oldman River basin.

Southern Alberta is not generally considered to be a highly industrialized region but about 25% of its work force are employed in primary resource extraction and manufacturing. While the consumptive use of water for municipal purposes is small compared to irrigation, the quality of water returned to the systems is greatly affected. Major non-consumptive uses of water within the basin are tourism and recreation.

Precipitation varies considerably from west to east across the basin. Some 500 to 600 mm of precipitation fall annually in the mountains and foothills region (mostly in the form of snow). In the prairie region

of the basin the precipitation varies from 450 mm in the west to less than 300 mm in the east.

A bar graph for the South Saskatchevan River at Highvay No. 41 showing the mean monthly discharge is presented in Figure 2. The streamflovs peak in late spring/early summer folloving the runoff of mountain snovmelt. Major headvater rainstorms can influence this hydrograph with the major events usually occurring in June or early July. About 60% of the streamflov occurs during the early May to mid-July period. Streamflovs are lovest in mid-winter.

The hydrometric gauging station on the South Saskatchevan River at Highvay No. 41 has been operated on a continuous basis from April 1966 to present. The mean annual flov is 173 m^3/s for the period of operation. A gauging station on the South Saskatchevan River at Medicine Hat, 05AJ001, has been operated from 1911 to present; the annual flov volumes at these two sites are nearly identical as no major inflov occurs between them. Furthermore the drainage area at Medicine Hat is 56 400 km^2 while at Highvay No. 41 it is 66 000 km^2, a 17% increase, but this additional drainage area is in a semi-arid region with little direct runoff to the river.

The long-term mean annual flov at Medicine Hat is 200 m^3/s which indicates that the period of operation of the Highvay No. 41 gauge was during a slightly drier period than the longer term period of the Medicine Hat operation. However, the lover mean annual flov could also be attributable to greater consumptive uses in the basin in latter years.

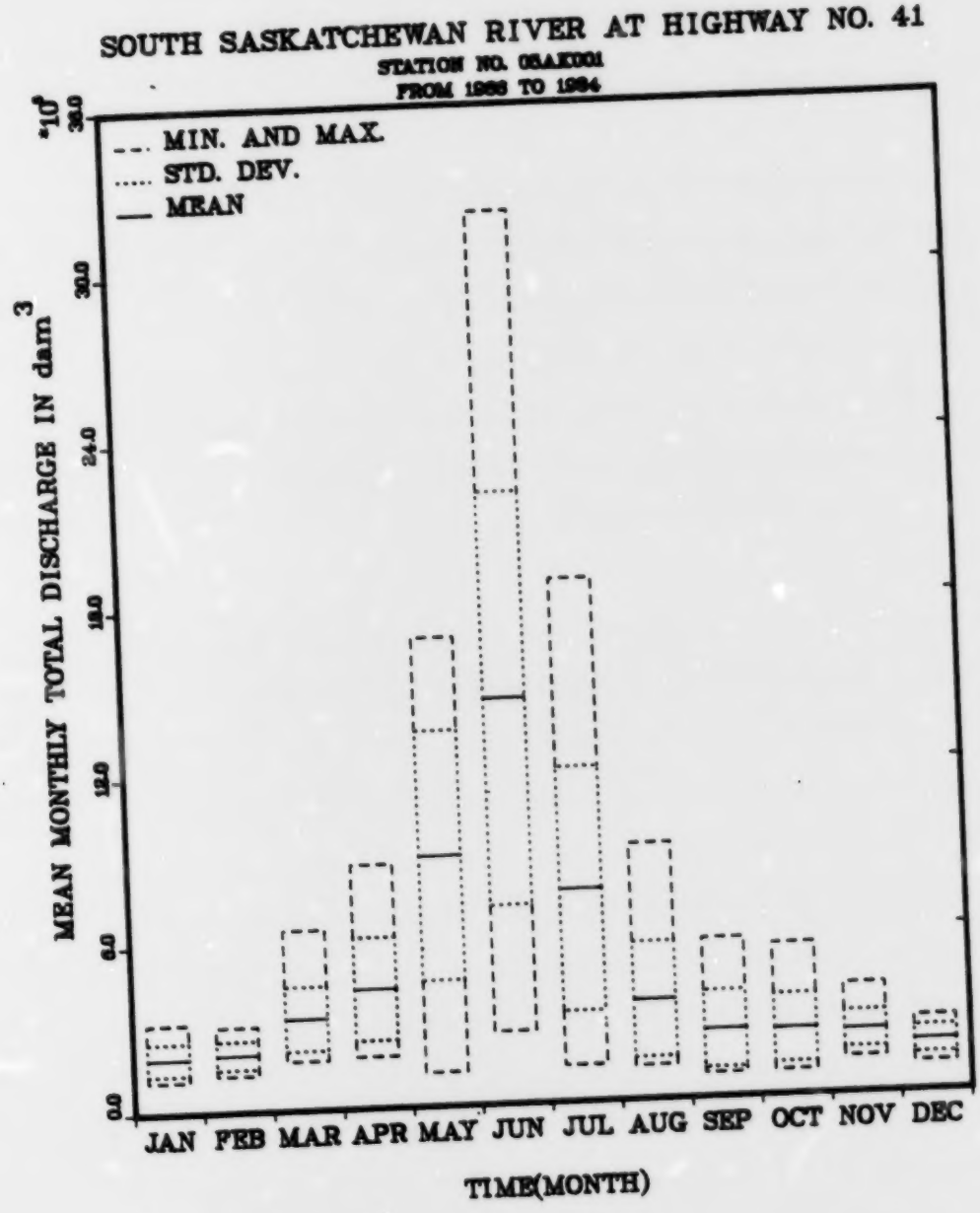

Figure 2. Distribution of mean monthly discharge in dam³.

The maximum recorded instantaneous peak flow at the South Saskatchewan River at Highway No. 41 gauge is 3 000 m^3/s on June 23, 1975 while the maximum instantaneous peak flow recorded at Medicine Hat is 5 660 m^3/s in August of 1902. The 1975 maximum instantaneous peak flow at Medicine Hat was 3 170 m^3/s on June 23, indicating significant attenuation between the gauges. This further verifies the fact that little runoff occurs between the two sites. The minimum recorded daily mean flow at Highway No. 41 is 8.5 m^3/s on November 3, 1984; the minimum recorded flow at Medicine Hat is 8.5 m^3/s on November 1, 1984.

In addition to the two gauging stations on the main stem of the South Saskatchevan River an another 150 active gauging stations are operated by Water Survey of Canada within the basin. Approximately 40 additional gauging stations are also operated in the basin by Trans Alta Utilities and Alberta Environment.

Suspended sediment data collection programs are presently being conducted at three sites in the basin: Oldman River near Waldrons Corner (05AA023), Oldman River near Brocket (05AA024), and Oldman River near Lethbridge (05AD007). Various sampling programs have been conducted at an additional thirty-two gauging station sites (Table 1).

Table 1 – Additional Sediment Stations Operated in the Saskatchewan River Basin

	Name	Type of Operation	Period of Record	Suspended Sediment		Particle Size		Bed Material	No. of Samples
				Conc. Data	Loads	Depth Integrating	Point Integrating		
05AA004	Pincher Creek at Pincher Creek	Misc.	1971-72	1971-72	–	–	–	–	14
05AA008	Crowsnest River at Frank	Misc.	1969-86	1969-86	1976-80	–	–	–	509
05AA010	Beaver Mines Creek near Beaver Mines	Misc.	1971	1971	–	–	–	–	2
05AA011	Mill Creek near The Mouth	Misc.	1971-72	1971-72	–	–	–	–	12
05AA022	Castle River near Beaver Mills	Misc.	1971-72	1971-72	–	1971	–	–	11
05AA026	Dutch Creek near The Mouth	Misc.	1971-72	1971-72	–	–	–	–	10
05AA027	Racehorse Creek near The Mouth	Misc.	1971-72	1971-72	–	–	–	–	12
05AA028	Castle Creek at Ranger Station	Misc.	1971-72	1971-72	–	–	–	–	11
05AB005	Trout Creek near Granum	Misc.	1971	1971	–	–	–	–	2
05AB013	Beaver Creek near Brocket	Misc.	1971-72	1971-72	–	–	–	–	11
05AB016	Lethbridge Northern Irrigation District Canal at Kanzaghies	Misc.	1977	1977	–	–	–	–	5
05AB021	Willow Creek near Claresholm	Seasonal	1964-86	1964-86	1964-74	1964-74		1973	1098
05AB022	West Streeter Creek near Hanton	Complete	1965-67	1965-67	1965-67	–	–	–	7
05AB023	Middle Streeter Creek near Hanton	Seasonal	1965-67	1965-67	1965-67	–	–	–	15
05AB024	East Streeter Creek near Hanton	Seasonal	1965-67	1965-67	1965-67				33
05AB028	Willow Creek above Chain Lakes	Complete	1965-86	1965-86	1969-77	1965-76		1966-67	1216
05AB029	Meadow Creek near The Mouth	Misc.	1971-72	1971-72	–	–	–	–	10
05AB030	Streeter Creek (Main Stem) near Hanton	Complete	1966-69	1966-69	1966-69	1967, 69	–	–	96
05AD002	Belly River near Stand Off	Misc.	1969,71,74-85	1969,71,74-85	–	–	–	–	97
05AD005	Belly River near Mountain View	Misc.	1971	1971	–	–	–	–	6
05AD028	Waterton River near Glenwood	Misc.	1974-86	1974-86	–	–	–	–	83
05AD037	Piyami Drain near Picture Butte	Misc.	1978	1978	–	–	–	–	1
05AD041	Belly River near Glenwood	Misc.	1985-86	1985-86	–	–	–	–	
05AE002	Lee Creek near Cardston	Misc.	1972	1972	–	–	–	–	10
05AE027	St. Mary River at International Boundary	Misc.	1977-78	1977-78	–	–	–	–	7
05AE037	Lee Creek at Beazer	Misc.	1979,81-82	1979,81-82	–	–	–	–	12
05AE039	Trout Creek near Beazer	Misc.	1980-81	1980-81	–	–	–	–	15
05AF010	Mayberries Creek at Brodin's Farm	Misc.	1971	1971	–	–	–	–	1
05AH003	Ross Creek near Irvine	Misc.	1971	1971	–	–	–	–	1
05AH005	Seven Persons Creek at Medicine Hat	Misc.	1979	1979	–	–	–	–	1
05AH041	Peigan Creek near Pakowki Road	Misc.	1971,76,78-82	1971,76,78-82	–	–	–	–	30
05AJ001	South Saskatchewan River at Medicine Hat	Misc.	1985-86 1974-86	1985-86 1974-86	1980-81,85-86	–	–	–	77

2.2 Hydrometric Station Description

The South Saskatchevan River at Highway No. 41 gauging station is located on the right bank approximately 2 400 metres above the highway bridge crossing. The site is 30 kilometres above the junction with the Red Deer River.

The instrumentation at the site includes a Leupold-Stevens A-71 strip chart recorder linked to a pressure sensing Stacom manometer system. Since May 1984 real-time data have been available with the installation of a Data Collection Platform. This station is important for the determination and monitoring of natural flow and flow deliveries. The instrumentation is housed in a 2.4 x 3.7 x 2.7 m wooden shelter which also is used for interim storage of sediment samplers, bottles and related equipment (Photo 1).

Streamflow discharge measurements are taken from a stream-propelled catamaran. The support cable for the catamaran is located upstream of the gauge shelter such that the discharge measurement cross section is directly across from the gauge shelter. From four to ten open water streamflow discharge measurements are made per year. No measurements are made during ice conditions but rather daily discharges during this period are computed based on metered flows at Medicine Hat.

The stage-discharge relationship at this station has been relatively stable with only minor shifting (±0.05 metres) occurring at lower stages. During the summer the stage-discharge relationship can be

affected by weed growth causing small negative shifts. The stage-discharge relations are reproduced in Figure 3. The 1986 curve is depicted by the solid line while previous relations are depicted by dashed lines. From this figure it is evident that changes to the control have been minor and these changes have only affected the lover stages. Some of the differences in the earlier relationships may have actually been due to improperly defined portions of the curve. As measurements were made at previously undefined stages the discrepancies would have been found and the curve redrawn to more closely fit the true relationship.

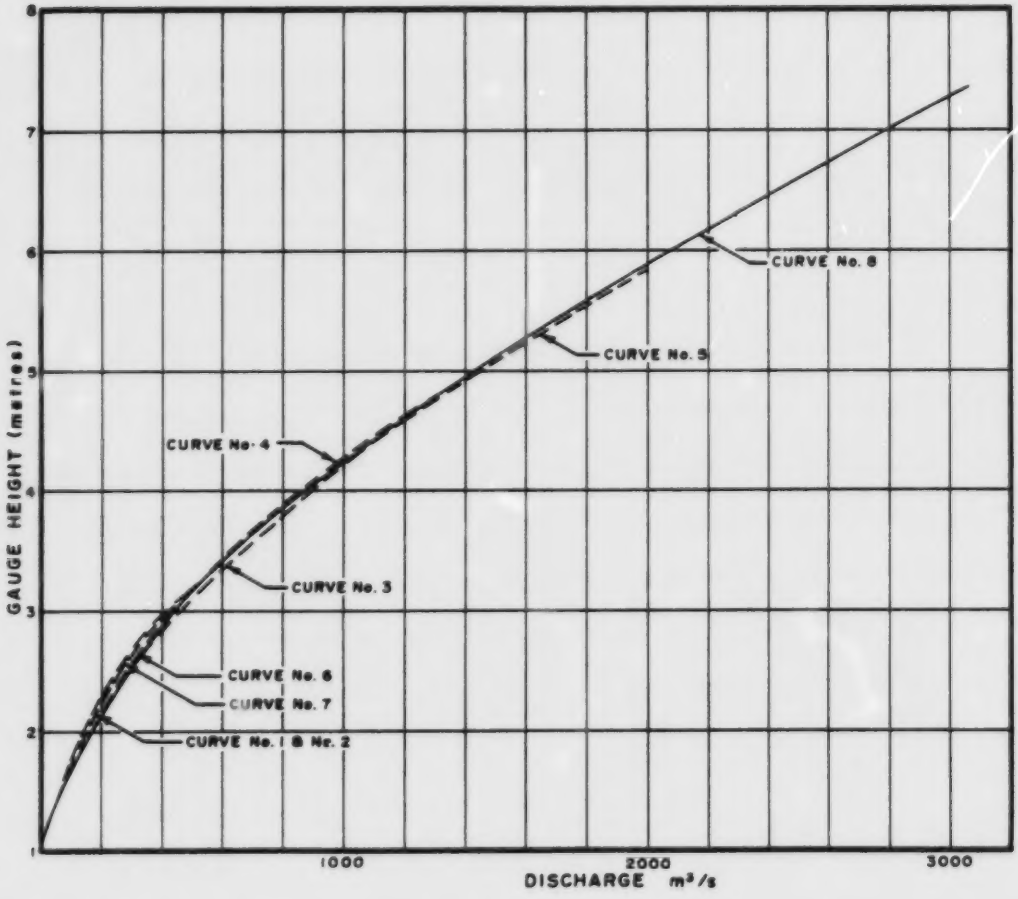

Figure 3. Stage discharge relation for the South Saskatchewan River at Highway No. 41 (05AK001 for 1966 to 1986).

2.3 Reach Description

The significant aspects of the river reach and channel are detailed in Table 2 (Kellerhals et al., 1972). An aerial photograph of the river reach showing the South Saskatchewan River at Highway No. 41 gauging station is presented in Figure 4.

Table 2 - River Reach, Valley, Valley Flat and Channel Features

Element	Description		
Hydraulic parameters:	Mean Flow	Two-Year Flood Discharges	Five-Year Flood Discharges
Mannings roughness (n)	0.46	0.34	0.29
Mean bed shear stress (q)	0.13	0.26	0.35
Ratio of mean velocity to friction velocity ($^{V_n}/V^*$)	7.7	11.5	14.4
Ratio of mean depth to D_{50} bed material size $^{d^*}/D_{50}$	7020	14100	19100
Slope from map	0.00036		
General description in vicinity of gauging station:			
Terrain	Plain		
Vegetation	Prairie short grass		
Land use	Open range and partly cultivated		
Valley features	Stream cut valley, frequent slumps, valley walls grass covered or bare		
Terraces	Two fragmentary levels		
Description of valley flat	None		
Channel description:			
Pattern	Sinuous		
Islands	Occasional islands		
Bar type	Point bars		
Relation of channel to valley	Entrenched		
Lateral channel activity:			
Lateral activity	Entrenched loop development		
Lateral stability	Stable		
Channel bank and beds:			
Channel bed	Sand and gravel		
Channel banks	Gravel overlain by silt; easily erodible rock		

Source: Kellerhals et al., 1972.

Figure 4. Aerial photograph of the South Saskatchewan River at Highway No. 41 gauging station.

3.0 Suspended Sediment Data

3.1 Types of Data

Although this site has been operated since 1966 (23 years) only during 1967 to 1977 were continuous suspended sediment records collected. For statistical reasons the standard operating period of April-October has been selected for this report as this period provides the longest period of record of comparable data. This period gives a record length of 18 years (1967 to 1984). Table 3 presents a summary of the types of sediment data collected as well as the operating schedule of the sediment program.

3.2 Sampling Equipment and Procedures

The initial suspended sediment sampling program began on April 28, 1966 at a sampling vertical located 122 metres from the right bank. This sampling vertical was located under the catamaran cableway opposite the hydrometric gauge shelter which is situated 2.4 kilometres upstream from the highway bridge. The depth-integrating sampling method was used to collect all samples at the single sampling vertical.

To facilitate sample collection the daily sampling site was moved to the highway bridge in 1971. The observer took the daily depth-integrated samples from a permanently mounted sampling site on the bridge rail near mid-stream. This site remained constant and the K-factors were determined by comparison to sediment measurements made from the catamaran.

Table 3 – Summary of Suspended-Sediment Data Used in this Report

Year	Daily Mean Discharge	Instantaneous Discharge	Period of Record	Daily Mean Concentration	Daily Mean Load	Particle Size Depth Integrating	Particle Size Point Integrating	Bed Material	Seasonal[2] Total Loads
1966	X		May–Dec[3]	X	X	X	X	X	
1967	X		Jan–Dec	X	X	X	X	X	X
1968	X		Jan–Dec	X	X	X	X	X	X
1969	X		Jan–Dec	X	X	X	X	X	X
1970	X		Jan–Dec	X	X	X	X	X	X
1971	X		Jan–Dec	X	X	X	X	X	X
1972	X		Jan–Dec	X	X	X		X	X
1973	X		Jan–Dec	X	X	X		X	X
1974	X		Jan–Dec	X	X	X		X	X
1975	X		Jan–Dec	X	X	X		X	X
1976	X		Jan–Dec	X	X	X			X
1977	X		Jan–Dec	X	X				X
1978	X		Jan–Dec	X	X			X	X
1979	X		Apr–Oct	X	X				X
1980	X		Apr–Oct	X	X	X			X
1981	X		Apr–Oct	X	X	X			X
1982	X		May–Oct	X	X	X			X
1983	X		Apr–Oct	X	X	X			X
1984	X	X[1]	Apr–Sept	X	X				X
1985	X	X				X			
1986	X	X				X		X	

Note: 1. Instantaneous data abstracted from discharge measurement records (Water Resources Branch, Environment Canada, Calgary)
2. Seasonal refers to the period April 1 to October 31 inclusive.
3. Continuous months (inclusive) with daily, monthly and total loads published.

A depth-integrated sample involves lowering a sampler from the water surface to the streambed, at a constant rate and returning to the water surface. This procedure allows water and sediment mixture to enter the sampler through a nozzle at a rate of flow approximating the actual velocity throughout the depth during transit. As water enters the sampling bottle contained in the streamlined sampler, air is expelled from the exhaust outlet.

The US DH-48 sampler was used for the few samples collected through the ice during the winter months. Samples at medium stage were collected using a 10 kg US DH-59 sample, Cashman (1988). The nozzle size varied depending upon the stream velocity. The majority of the single vertical samples were collected by a local observer. The balance were collected by the Water Survey of Canada technicians during the five vertical sampling measurements to determine the average concentration in the cross section.

A suspended sediment measurement consists of collecting a depth-integrating sample at the mid-point of five panels in the cross section with each panel representing approximately 20% of the total measured discharge. The sediment concentration is weighted with the flow discharge for each panel or subsection.

The average concentration for the cross section is determined as:

$$C = \frac{R}{Q \times 0.0864}$$

where C = the average suspended sediment concentration in mg/L for the cross section

R = the total suspended sediment load in tonnes/day

Q = the total discharge in m^3/s from the discharge measurement

0.0864 = the conversion factor used to convert "C" into mg/L when R is in tonnes/day and Q is in m^3/s.

The K-factor is determined by dividing the calculated average concentration in the cross section by the concentration of the single vertical sample.

Point-integrating samples were collected using a US P-61 sampler with a medium nozzle, Cashman (1988). These samples were collected in the same flow panels as the depth-integrating measurements. The US P-61 sampler has a solenoid in the head of the sampler to open and close the intake of the nozzle. To take a point-integrating sample the sampler is lowered to a pre-determined depth, the nozzle is opened using an electrical charge and the sample intake is timed until approximately 400 mL of sediment/water mixture is in the sample bottle. The nozzle is closed, and the sampler is raised to remove the bottle. Samples are continued to be collected in this manner, at various depths until enough are collected to give a representative average concentration or particle size distribution through the entire depth of the stream. This method of sampling is continued for each sampling panel.

3.3 Sediment Discharge Computation Procedures

The following is an outline of the computation procedures used to calculate the suspended sediment discharge. For the early years where K-factors were computed, these values were plotted versus the appropriate day and a smooth curve was drawn through the points. From this curve a K-factor was then determined for each day. This K-factor was applied to the concentration of the single vertical to have it equal the average concentration of the entire cross section. For those years with very few or no suspended sediment measurements the K-factor was assumed to be 1.0. The total average sediment concentration as computed from the depth-integrating measurements and the corrected concentration for the single vertical samples are plotted against time on the water level recorder strip charts. A sediment concentration hydrograph is then drawn by joining the concentration points with a smooth curve. The water level record on the recorder chart, daily precipitation data, water and air temperature are used as a guide in drawing the concentration curve.

The daily mean concentration for each day of record is determined from the sediment concentration hydrograph by use of a scanner and subdividing or by following the automated procedures utilizing a digitizer as outlined in the manual for digitizing (Environment Canada, 1988).

The suspended sediment load for each day is then computed from the formula:

$$R = Q \times C \times 0.0864$$

where R = suspended sediment load in tonnes/day

Q = daily mean discharge in m^3/s

C = daily mean concentration in mg/L

0.0864 = conversion factor used to convert "R" into tonnes/day when Q is in m^3/s and C is in mg/L.

3.4 Sampling Strategies

As determination of total load was the initial objective, the sediment program was operated year round. Samples were collected on a flow-weighted basis, i.e. more samples were collected during the higher flows and fewer during low flow. This is well illustrated in Figure 5. The continuous suspended sediment sampling program was conducted from 1967 to 1978 inclusive. Sample coverage for the years 1979 to 1984 was reduced to the open water months, April to October. The elimination of winter sampling was made on the basis of very low concentration which resulted in negligible contribution to the total loadings. The station sampling program was further reduced to miscellaneous status for 1985 to present.

A summary of the number of days that suspended sediment samples were collected is presented in Table 4. During April to October a total of 2634 days were sampled of which 1086 days or 41.2% were sampled during the high flow periods.

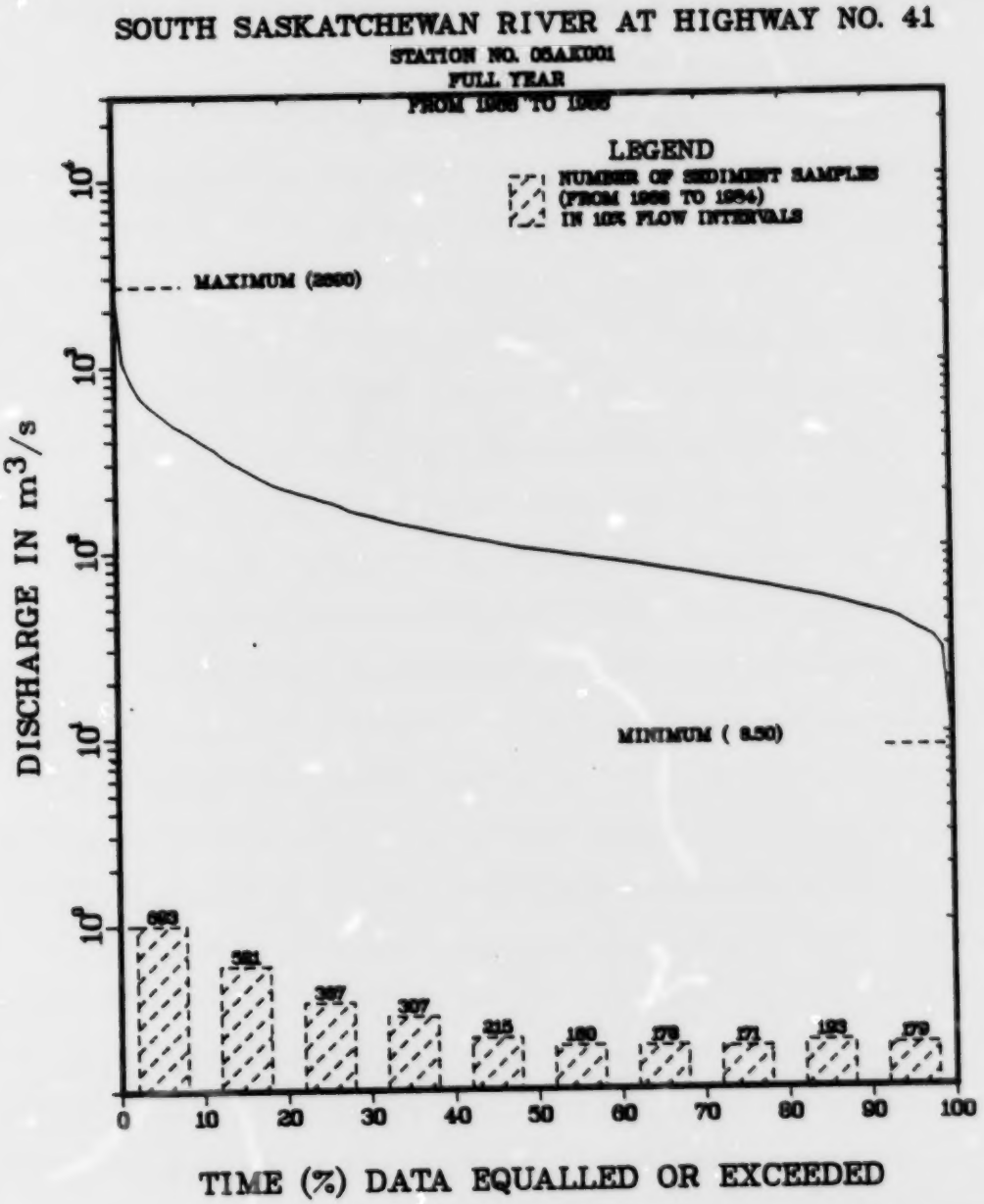

Figure 5. Flow duration and sediment sampling chart for 1966 to 1984 (1985 and 1986 not included as loads were not determined for these years).

Table 4 - Summary of Suspended-Sediment Sampling
Showing Number of Days Sampled each Month

Year	Total	Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.
1966	123				2	26	21	21	17	16	14	2	4
1967	166	4	5	4	4	31	30	29	17	14	16	6	6
1968	156	4	5	6	15	19	28	21	16	1	18	10	3
1969	194	6	6	8	20	29	29	30	24	15	13	13	7
1970	195	6	5	5	21	27	30	31	16	18	16	12	8
1971	202	5	5	6	24	31	30	31	23	17	17	7	6
1972	252	6	5	18	30	31	30	29	31	25	19	21	7
1973	177	4	5	11	19	22	29	22	19	17	17	7	5
1974	195	6	5	5	14	30	30	26	18	17	17	16	11
1975	182	4	5	6	12	27	28	28	19	17	16	13	7
1976	164	5	5	6	16	27	22	18	23	19	18	4	1
1977	134	2	1	3	15	17	16	18	17	18	17	9	1
1978	146	1	1	1	15	23	28	25	16	17	18	1	
1979	122				7	23	23	18	16	19	16		
1980	119				3	20	29	17	17	17	16		
1981	145			2	16	22	27	28	18	17	14	1	
1982	116				6	19	27	18	18	11	17		
1983	119			1	15	18	20	18	16	17	14		
1984	97				17	24	28	14	5	5	4		
1985	9					2	1	1	1	2	2		
1986	8				1	2	1	1	1	1	1		
Total	3021*	53	53	82	272	470	507	444	348	310	300	116	66

*Total of 3021 represents the total number of days during the period 1966 to 1986 that sediment samples were collected. It is very possible that two, three, four or more samples were collected on the days with very high sediment concentration or flow discharge.

Table 5 presents K-factor values for 1966. Additional K-factor values are presented in Appendix A. The variance in the K-factor have not been carefully investigated but is related to such factors as: the location of the single vertical; the sampling error; cross-sectional variations of concentration; choice of suspended sediment samplers. Possible seasonal variation in suspended sediment particle sizes and varying source of suspended sediments or location of storms within the basin are other factors that affect the K-factor.

Table 5 - K-Factor Values for 1966

Date	Discharge m^3/s	Average Concentration mg/L	Single Vertical Concentration mg/L	K-Factor	Remarks
1966					
May 5	199	41	41	1.00	
May 9	233	31	43	0.72	ETR method
May 14	570	1094	1103	0.98	
May 26	407	230	230	1.00	
June 8	1150	2190	2033	1.08	
June 23	491	135	210	0.64	
July 21	380	199	172	1.15	
Aug 17	140	21	23	0.91	Used 1.0
Sept 16	136	9	16	0.56	Not used
Oct 21	119	27	29	0.93	Used 1.0
Dec 13	86	8	9	0.89	Used 1.0

3.5 Range of Flows Sampled

The minimum daily mean discharge at which a sample was collected during the period 1966 to 1983 was 33.5 m^3/s (September 9, 1979). The sediment concentration was 2 mg/L. This discharge was equalled or exceeded 99% of the time. The maximum daily mean discharge sampled was 2690 m^3/s

on June 23, 1975 with a sediment concentration of 8100 mg/L. The historical maximum instantaneous discharge of 3000 m^3/s occurred at 19:00 mst. on June 23, 1975. Instantaneous suspended sediment concentrations and corresponding instantaneous streamflov discharges are listed in Appendix B.

3.6 Representativity of Sediment Record Period

As the period of flov record for station 05AK001 is coincidence with that of the sediment program, it is not possible to determine hov representative the sediment record is of the long term flov conditions. Hovever, the length of flov records at station 05AJ001, South Saskatchevan River at Medicine Hat (Figure 1) being vell correlated with 05AK001, are useful in this regard as flov records can be extended back to 1912.

Total seasonal runoff (April to October inclusive) over the period 1967-1986 at these two stations are strongly correlated (r^2=0.99 from a pover curve regression). Return periods for total runoff at 05AK001 as generated by a log-normal regression, are plotted in Figure 6, and the years during vhich sediment vas collected are indicated. Based upon the relation shovn in Figure 6, the sediment program vas operating during a period of average to belov average runoff.

A similar comparison using maximum annual flovs is shovn in Figure 7 using annual maximum daily discharges (again data from 05AJ001 for years 1912 to 1965 vere used to extend the data record at 05AK001). The sediment program vas operational during a period of above-average

spring flood flows, which is an important consideration as most of the annual suspended sediment load passes during the spring flood period.

Another method for illustrating the representativity of the sediment record is shown in Figure 8. The sediment program began during a period in which both flow and suspended sediment load were either above or near to mean conditions, and from 1976 onward both parameters were more frequently below their means. Unfortunately, this diagram only shows the variability of flow characteristics within the period of sediment records.

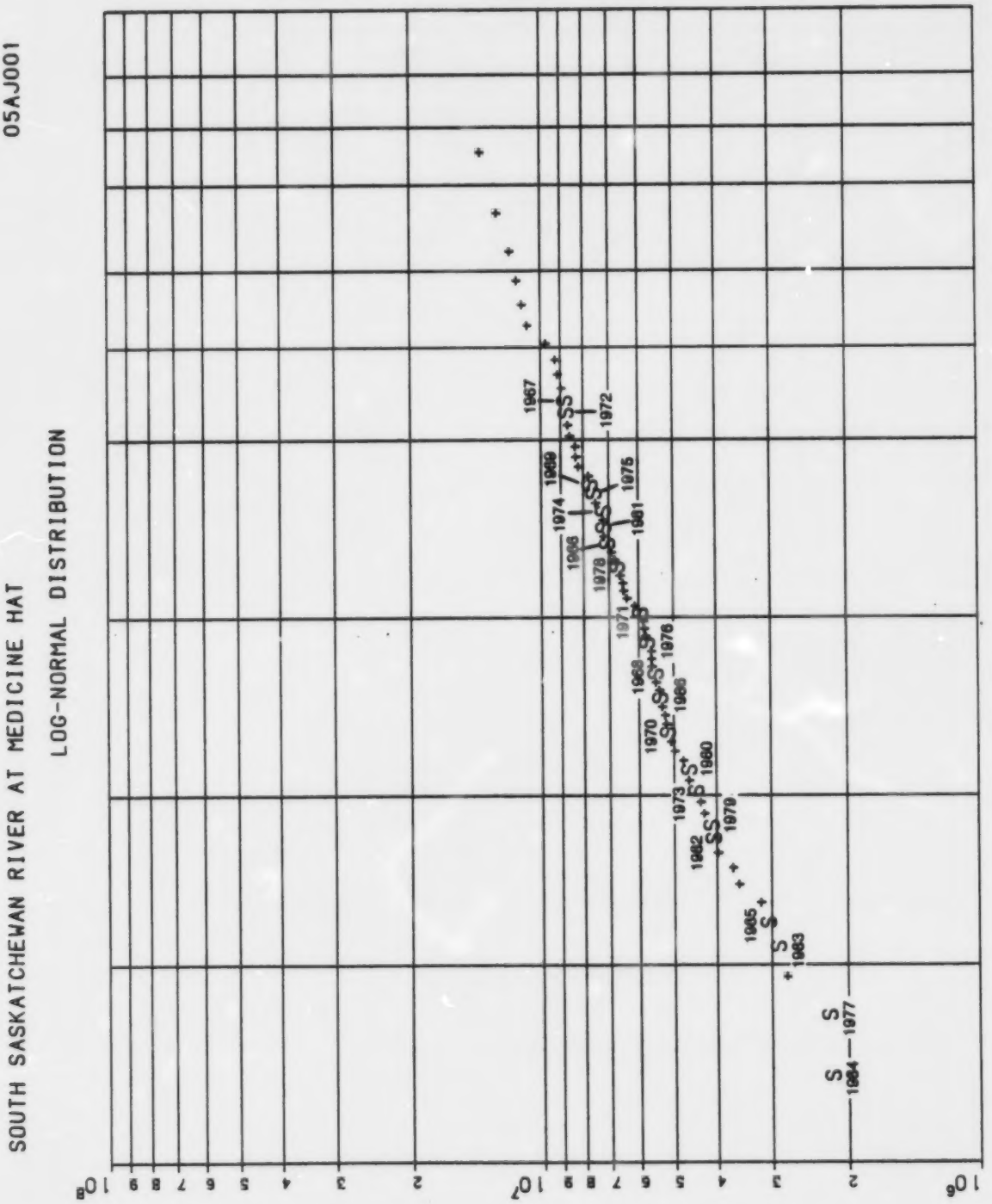

Figure 6. Frequency plot for total annual flows for years 1966 to 1986. For years 1912-1965 flow volumes were generated from a functional relationship with station 05AJ001 at Medicine Hat.

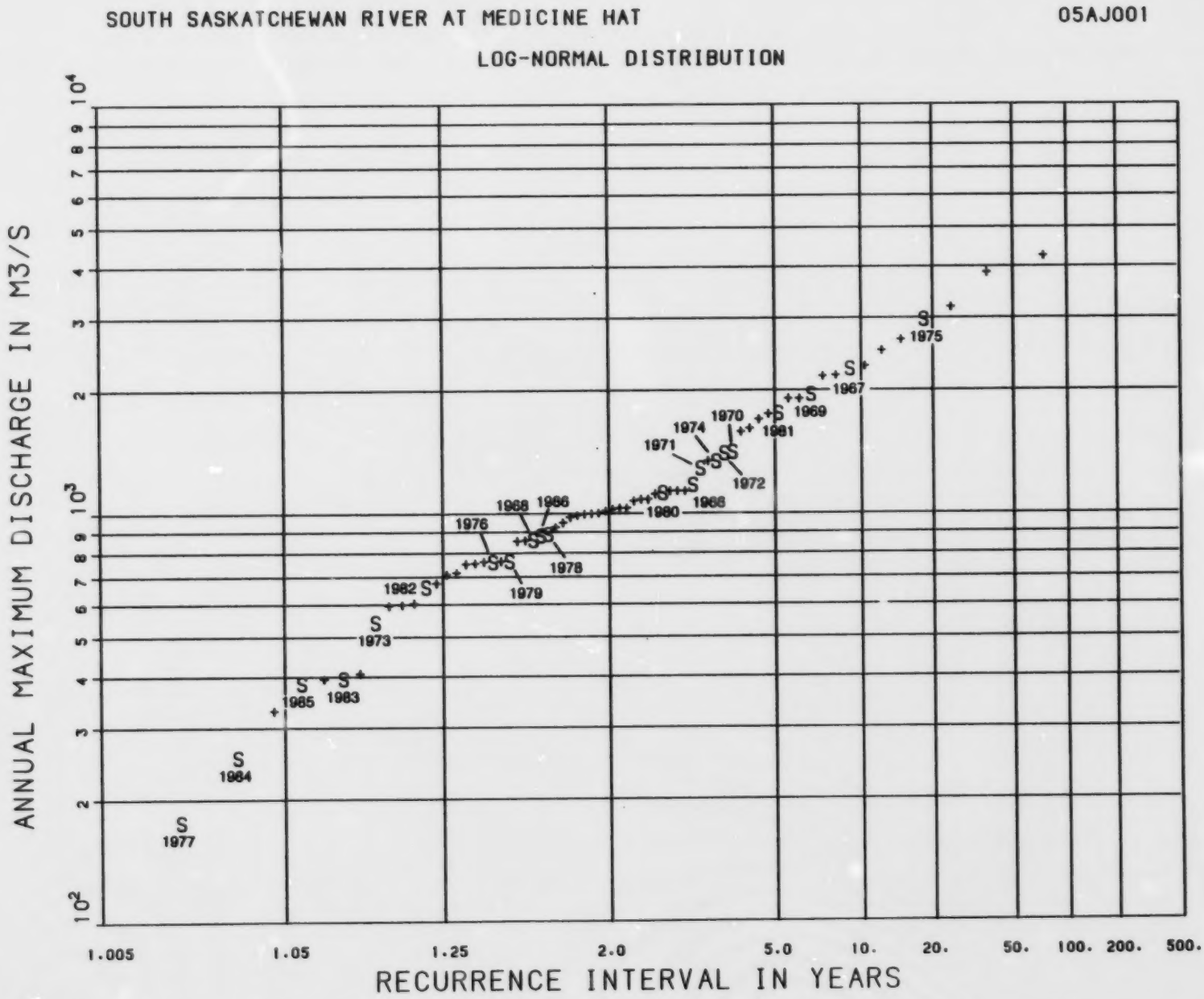

Figure 7. Frequency plot for annual maximum daily flows for years 1966 to 1986. For years 1912-1965 flow maximums were generated from a functional relationship with station 05AJ001 at Medicine Hat.

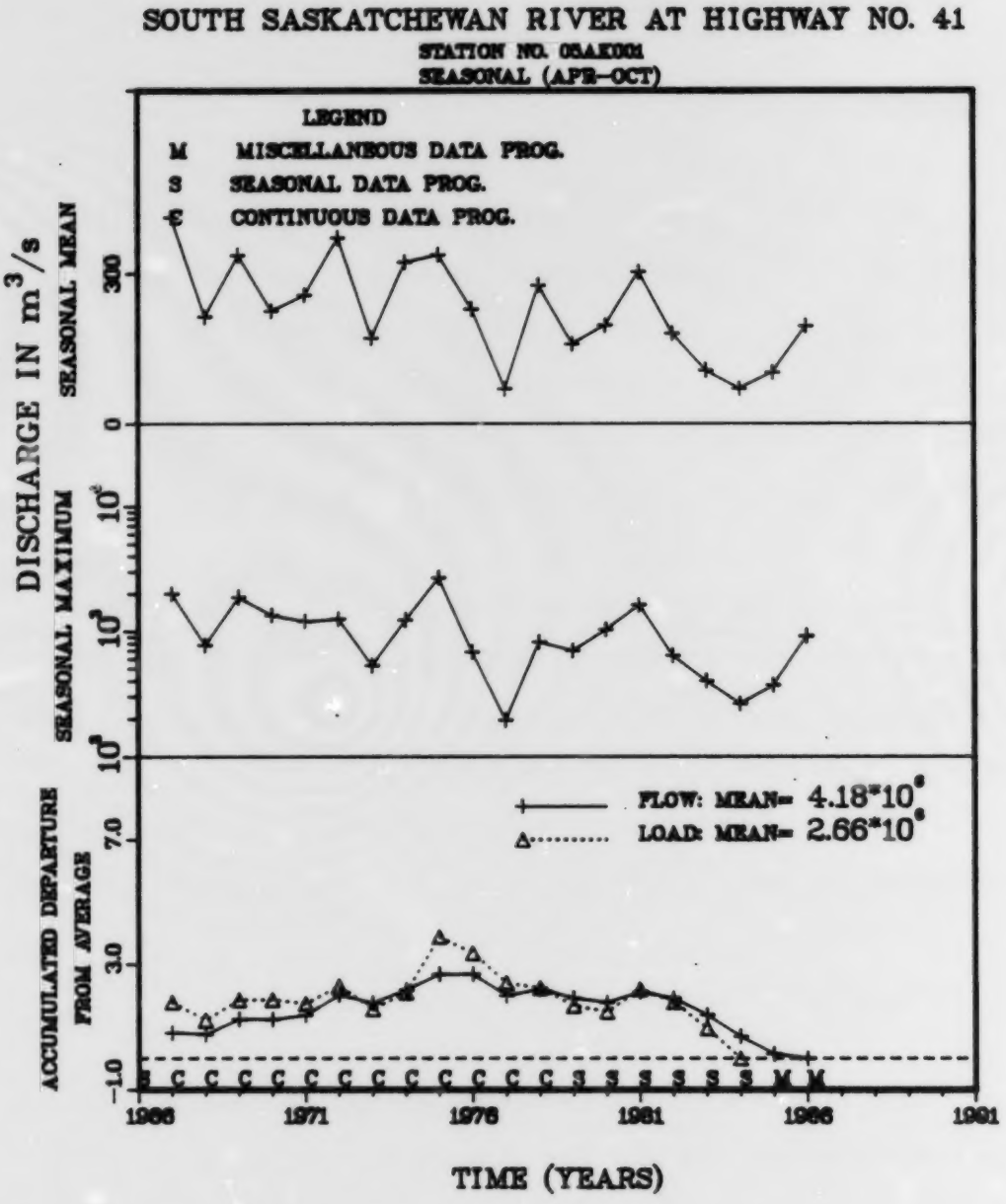

Figure 8. Flow history during sampling program (April to October) 1967 to 1984.

4.0 Suspended Sediment Transport

4.1 Transport Regime

As is typical of most streams in this region (Ashmore, 1987), the suspended sediment transport is strongly seasonal with most of the load being transported during the rise to peak discharge period (May to July). This pattern is very well illustrated in Figures 9 and 10. The sample collection is denoted by the symbol "S". Similar hydrographs for the remaining years of record are continued in Appendix C.

Throughout the March-October period, suspended sediment transport occurs in distinct events (Figure 9, shows four sediment peak events for 1967 while Figure 10 shows three significant peak events for 1984). These peaks range in duration from a few days to 10 days.

4.2 Suspended Sediment Particle Size

4.2.1 Depth Integrating

Particle size analysis of the suspended sediment samples indicates that all particles are less than 2 mm in diameter.

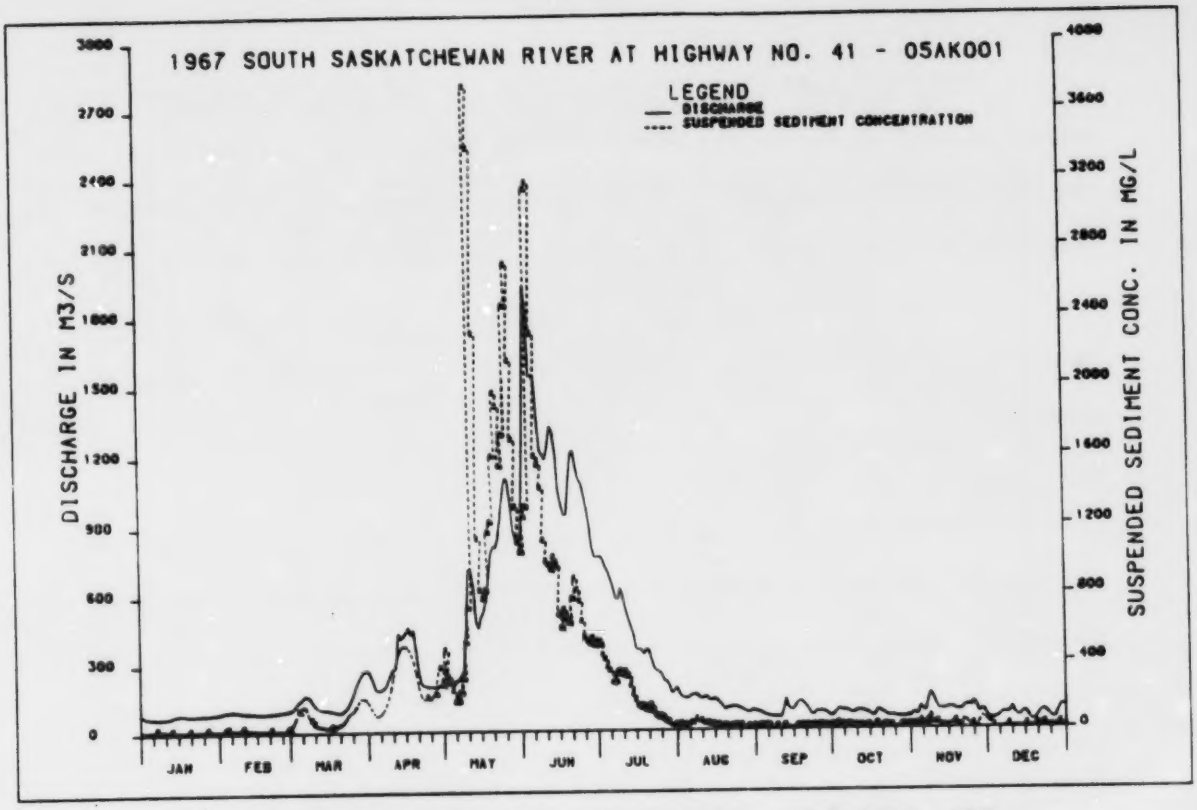

Figure 9. Annual distribution of daily mean concentration and discharge – 1967.

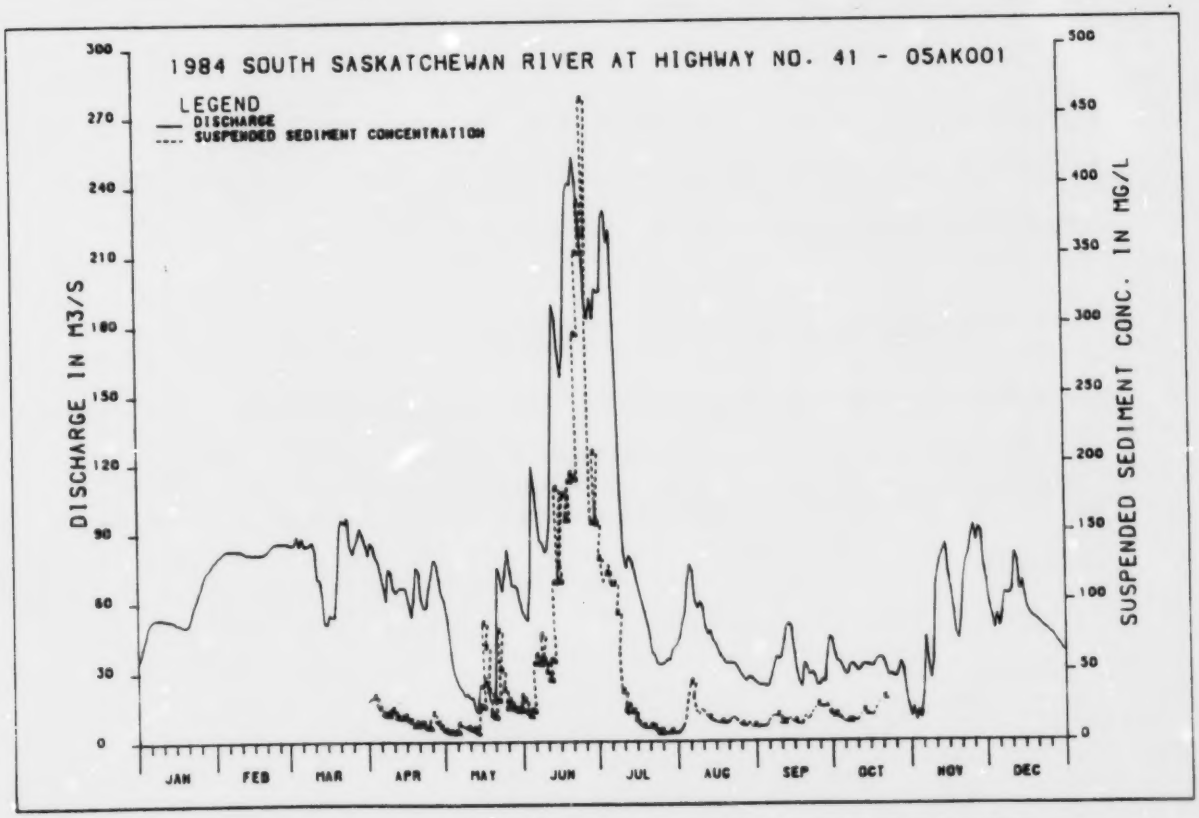

Figure 10. Annual distribution of daily mean concentration and discharge – 1984.

Particle size distribution curves for 156 samples are shown in a composite plot in Figure 11. The data for these curves are presented with the instantaneous suspended sediment data in Appendix B. These samples were mainly collected during the peak concentration period, May to July. For 1967, 1969, 1971 and 1972 sampling began in April. In 1976 and 1985 sampling was extended to August while in 1968 the sampling was extended to September.

The pattern in these data, as shown in Figure 12, shows an increase in particle size with discharge until about 1000 m^3/s and then decreases. Suspended material is mainly silt which ranges from 26% to 79% with a mean of 54%. The clay content ranges from 11 to 66% with a mean of 25% and the sand size ranges from 1% to 56% with a mean of 21%. While there is no clear relationship between the percent of silt and clay with the overall concentration, there is a general pattern for lower percentages for flows near 800 m^3/s (Figure 12). However, the effect of the sampling strategy on this apparent relationship is unknown. The D_{50} appears to follow the same general pattern with increasing discharge (Figure 13) and ranges from 0.002 mm to 0.136 mm with a mean of 0.014 mm.

A comparison of the sand content of the total concentration for all samples analyzed during the entire period of record is shown in Figure 14. The sand concentration increases with an increase in discharge. The D_{50} for sand is shown in Figure 15 and indicates a decrease with increasing discharge.

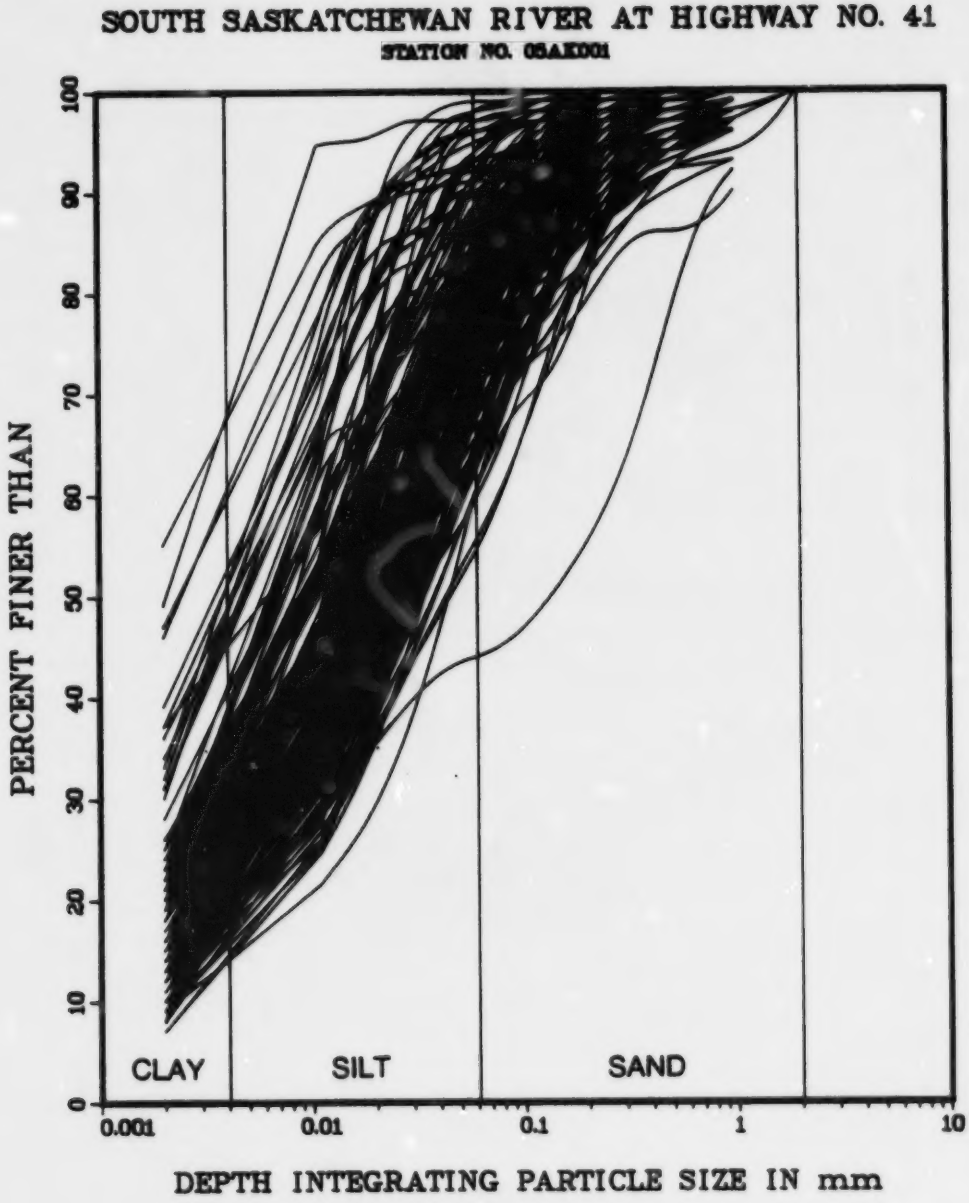

Figure 11. Composite plot of suspended sediment particle size distribution.

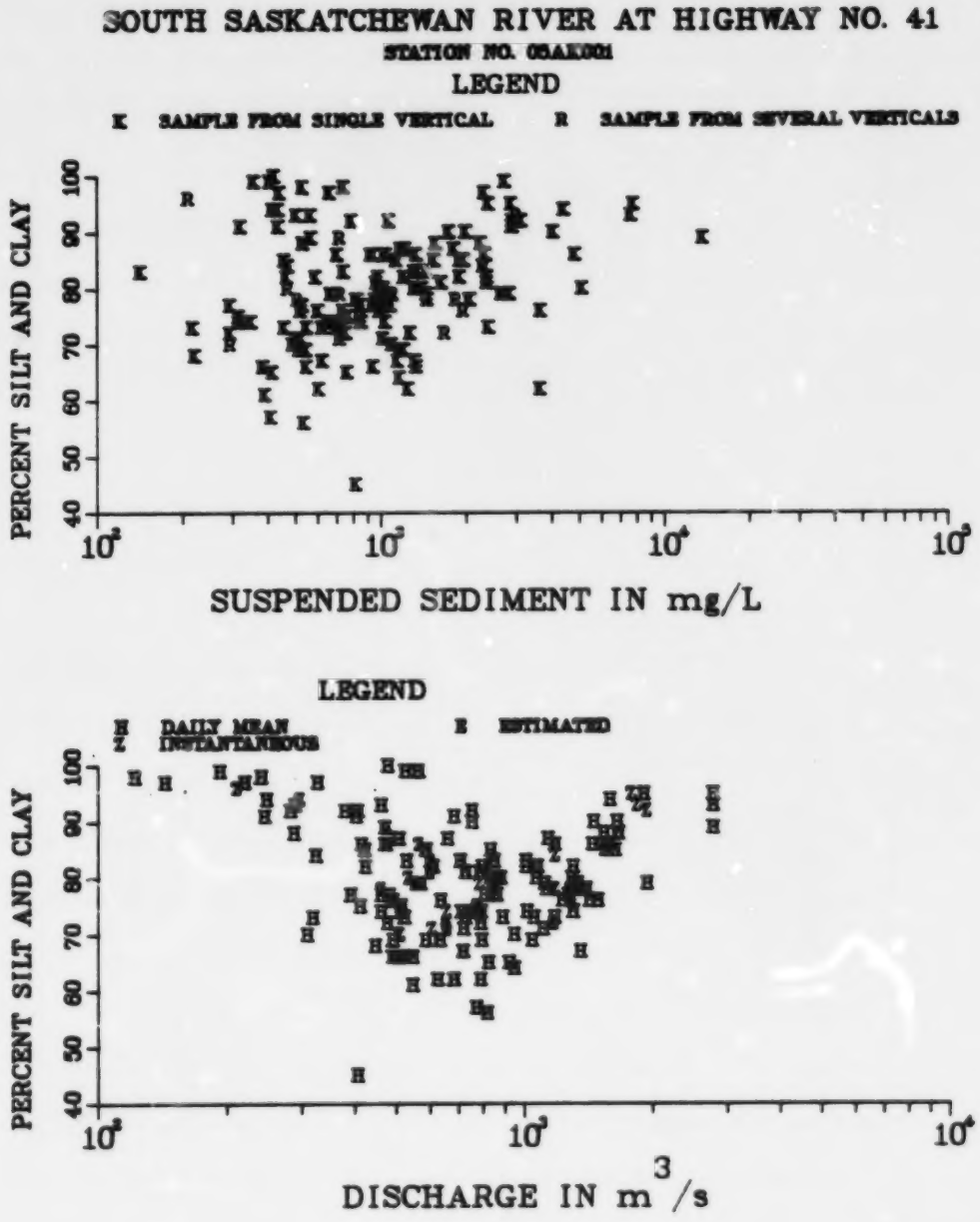

Figure 12. Percent silt and clay in suspended sediment and discharge.

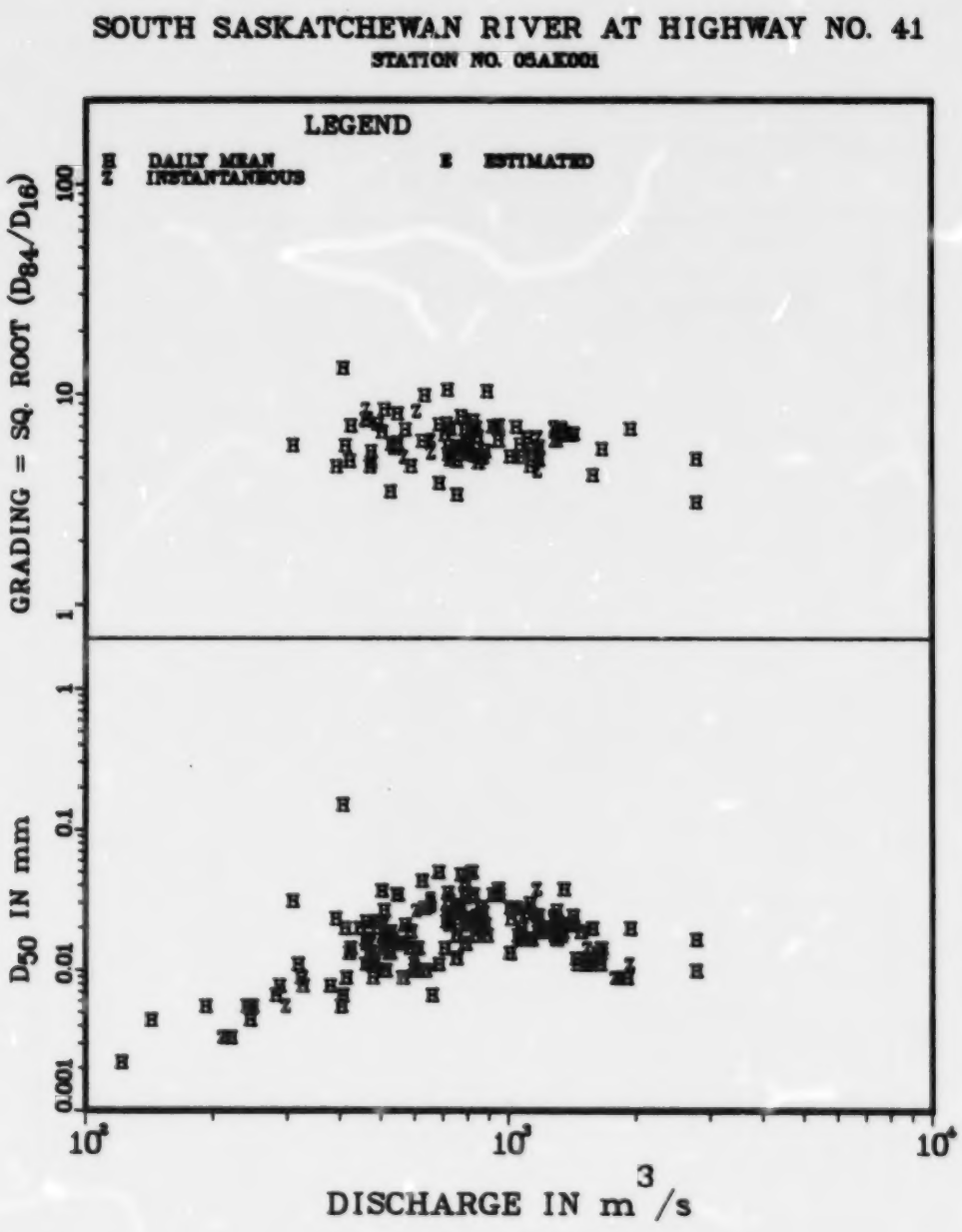

Figure 13. D_{50} and grading of suspended sediment versus discharge.

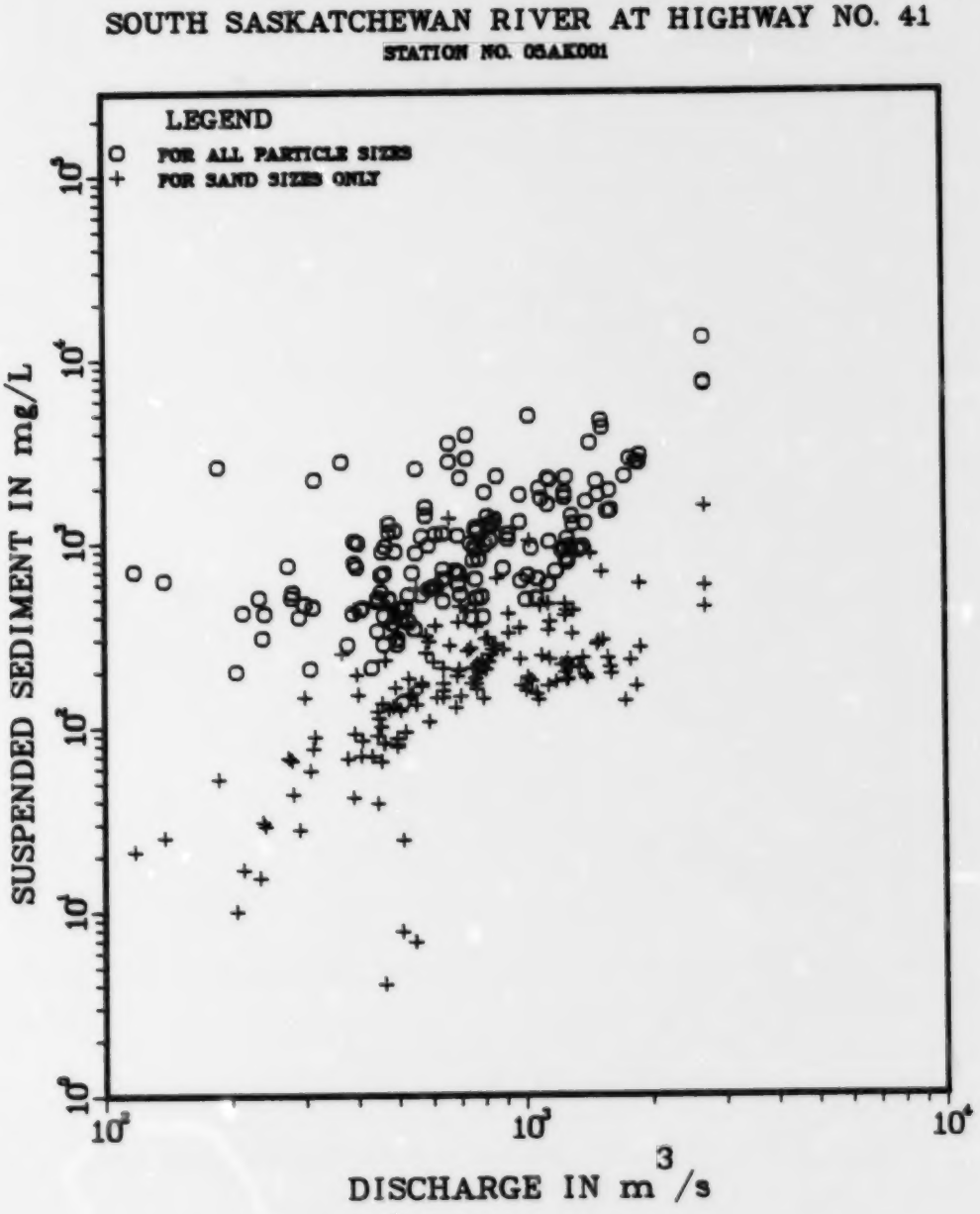

Figure 14. Variation of concentration for all particle sizes and for sand only.

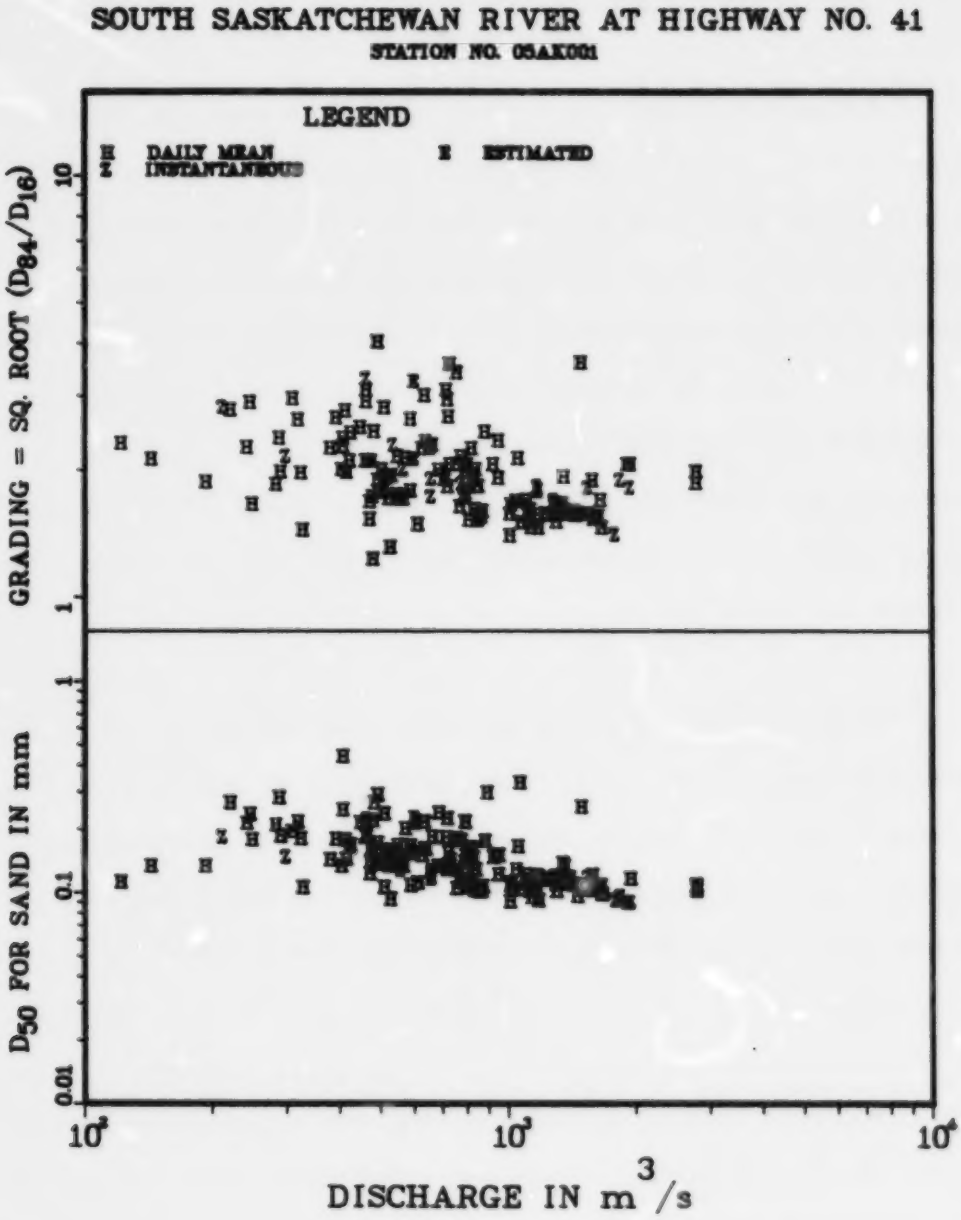

Figure 15. D_{50} and grading for sand versus discharge.

4.2.2 Point Integrating Particle Size

Particle size data for 9 point integrating measurements (233 samples) were collected during the years 1966 to 1971. The point integrating samples provide data on cross sectional variation of the suspended sediments. Data presented give the total concentration, and the concentration of sand, silt and clay at five verticals across the channel and for 4 to 7 depths in each vertical. Table 6 shows a typical data listing for a point integrating measurement. Data for additional measurements are presented in Appendix D. Cross section variation in total concentration and the concentration of sand, silt and clay are shown in Figures 16, 17, 18 and 19.

Point integrated measurements were taken for discharges ranging between 569 m^3/s and 1 890 m^3/s. Concentrations were usually lowest near the surface increasing towards the streambed. For the measurements collected at the high flows it can be seen that the concentration increases from the near bank to mid-stream and then decreases as the far bank is reached.

Neither silt nor clay concentration show any marked variation from one vertical to another or throughout the depth. This agrees with the assumption of Ongley (1989). It must be realized that the concentration variation is not necessarily just a straightforward increase

Table 6 - Point Integrating Particle-Size Analysis of Suspended Sediment for 1966

(METHOD OF ANALYSIS: B - BOTTOM WITHDRAWAL TUBE; N - IN NATIVE WATER; W - DISTILLED WATER ADDED)

Date	Time	Discharge Measurement (m^3/S)	Water Temp. (C°)	Vertical (m)	Depth of Sample (m)	Concentration of Sample(s) (mg/L)	Percent Finer Than Indicated Size, in Millimetres										Method of Analysis
							0.002	0.004	0.008	0.016	0.031	0.062	0.125	0.250	0.500	1.000	2.000	
May 14	17:15	569	12.2	61.0	0.09	945	18	27	40	58	77	92	98	100				[illegible]
					1.52	1 210	17	21	33	47	64	81	95	100				[illegible]
					2.41	1 360	12	18	27	41	56	73	88	97	99	100		[illegible]
					2.77	1 550	10	17	26	38	51	66	86	96	98	99	100	[illegible]
					3.02		STREAMBED											
				91.4	0.09	965	17	27	40	59	77	91	98	100				[illegible]
					1.07	1 040	15	25	38	54	73	88	95	98	99	99	100	[illegible]
					2.16	1 120	17	23	34	50	67	82	92	97	99	100		[illegible]
					2.87	1 270	15	19	30	45	61	75	83	90	93	95	100	[illegible]
					3.35	1 410	14	17	29	42	56	70	80	88	94	96	100	[illegible]
					3.60		STREAMBED											
				112.8	0.09	940	16	26	40	57	75	90	97	99	100			[illegible]
					1.04	1 010	15	19	35	53	73	87	93	98	100			[illegible]
					2.07	1 120	7	12	37	45	63	77	86	92	96	98	100	[illegible]
					2.77	1 200	10	19	31	44	62	74	82	90	93	96	100	[illegible]
					3.29	1 240	12	19	29	44	59	72	80	93	96	98	100	[illegible]
					3.47		STREAMBED											
				121.9	0.09	950	16	20	31	45	60	71	77	83	90	95	100	[illegible]
					1.22	1 020	12	20	33	50	70	87	93	97	99	100		[illegible]
					2.44	1 170	16	21	32	48	64	78	87	93	96	98	100	[illegible]
					3.26	1 410	13	18	28	41	54	66	76	86	93	96	100	[illegible]
					3.60	2 570	7	9	14	22	29	36	50	68	82	91	100	[illegible]
					4.08		STREAMBED											
				158.5	0.09	910	13	21	36	56	78	94	99	100				[illegible]
					1.52	1 000	14	20	32	53	75	91	99	100				[illegible]
					3.05	1 050	13	21	34	51	71	88	97	99	100			[illegible]
					4.08	1 080	14	22	35	52	72	88	97	100				[illegible]
					4.60	1 100	15	25	39	56	68	86	96	99	100			[illegible]
					5.09		STREAMBED											

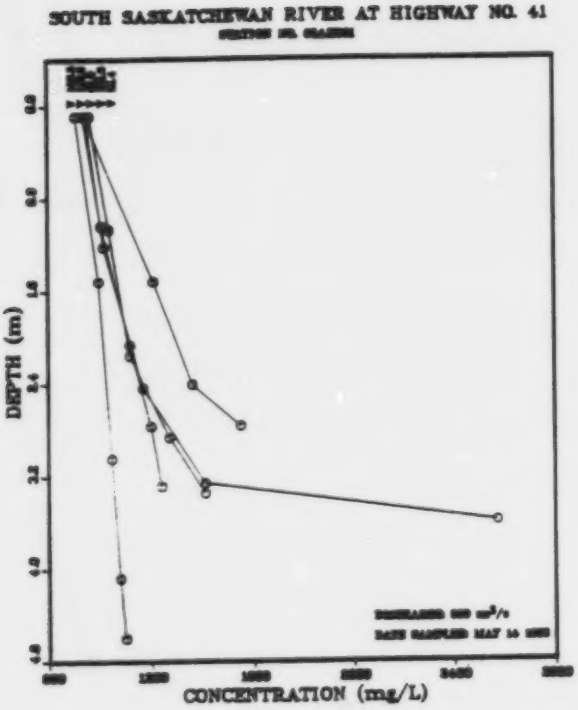

Figure 16. Cross section variation in concentration, May 14, 1986.

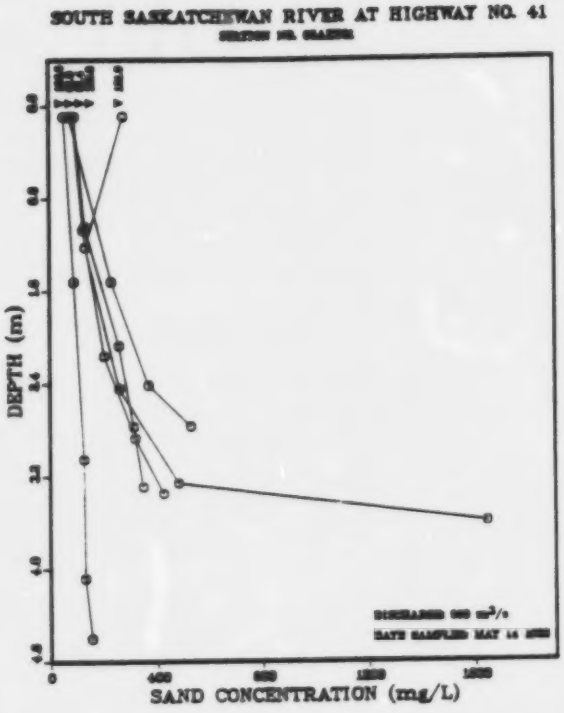

Figure 17. Cross section variation in sand concentration, May 14, 1986.

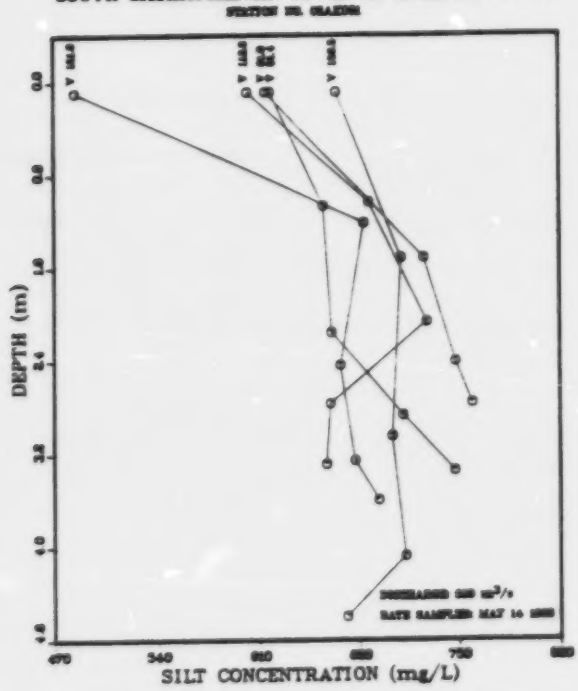

Figure 18. Cross section variation in silt concentration, May 14, 1986.

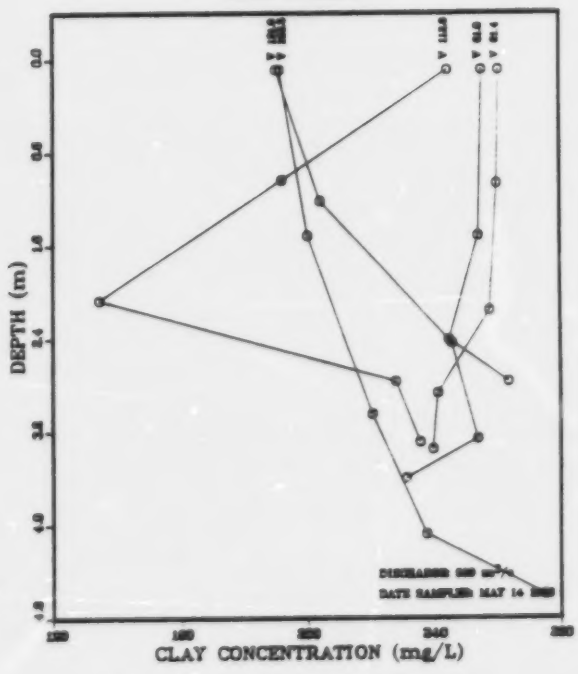

Figure 19. Cross section variation in clay concentration, May 14, 1986.

straightforvard increase from surface to streambed nor is the silt and clay fraction constant for each vertical in the cross section for each measurement.

In contrast to the silt and clay fraction, the sand concentration would be expected to shov considerable variations vertically, from surface to streambed. This is supported by the available data. Surface concentration is as lov as 1% or 2% of the total concentration while close to the streambed it is as high as 60% of the total concentration. This does vary with discharge but is also dependent on the position of the sampler intake relative to the streambed.

4.3 Suspended Sediment Loads

The significance of the short duration of sediment load events is depicted in Figure 20, where the suspended sediment loads for 1% and 10% of the period (i.e., 2 days and 21 days) are compared with the total of 214 days for the April to October period. The year 1966 is not included as the year is incomplete. The maximum 2 consecutive day load of 2 950 000 tonnes occurred in 1975. This vas 39.7% of the April to October load and 39.6% of the annual load. The maximum 21 consecutive day load also occurred in 1975 and vas 5 229 000 tonnes or 70.3% of the April to October load. The maximum 2 consecutive day load of 49 300 tonnes occurred in 1977. This is quite significant as it is 46.5% of the total seasonal load. These data are also presented in Table 7.

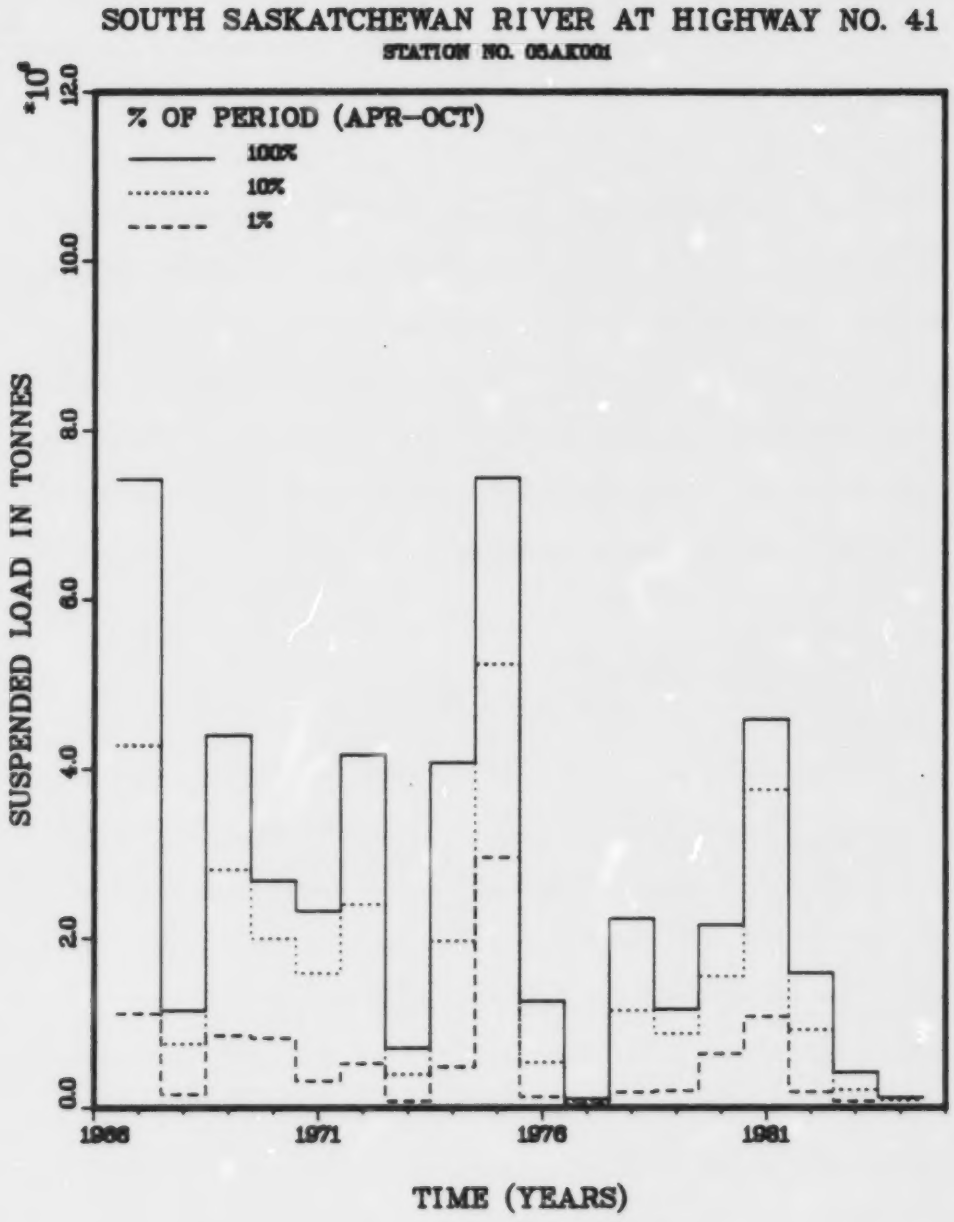

Figure 20. Event loading 1% (2 days) and 10% (21 days) of seasonal period, April to October.

Table 7 - Comparison of Suspended Sediment Load in Periods Amounting to 1% and 10% for April to October (214 days)

	Total For Period April to October		Best 10% of Period (21 days)			Best 1% of Period (2 days)		
Year	Date of Maximum (A)	Total Value (B) (Tonnes)	Starting Date (C)	Total Value (D) (Tonnes)	% of Column (B) (E)	Starting Date (F)	Total Value (G) (Tonnes)	% of Column (B) (H)
1966				Incomplete Period				
1967	Jun 03	7 417 155	May 19	4 276 600	57.7	Jun 03	1 104 000	14.9
1968	Jun 09	1 141 137	May 26	748 700	65.6	Jun 08	154 800	13.6
1969	Jul 02	4 395 204	Jun 27	2 809 310	63.9	Jul 02	846 000	19.2
1970	Jun 17	2 678 594	Jun 14	1 994 400	74.5	Jun 17	816 000	30.5
1971	Jun 10	2 318 245	May 28	1 580 800	68.2	Jun 09	313 000	13.5
1972	Jun 04	4 165 928	May 25	2 398 500	57.6	Jun 04	517 000	12.4
1973	Jun 17	700 166	May 30	392 010	56.0	Jun 17	76 700	11.0
1974	May 04	4 072 385	Jun 11	1 964 400	48.2	May 04	478 000	11.7
1975	Jun 23	7 435 380	Jun 11	5 229 000	70.3	Jun 23	2 950 000	39.7
1976	Aug 10	1 251 906	May 10	531 450	42.5	Aug 10	127 300	10.2
1977	Jun 15	106 100	Jun 01	76 118	71.7	Jun 15	49 300	46.5
1978	Jun 10	2 230 944	May 24	1 139 800	51.1	Jun 10	181 600	8.1
1979	May 30	1 155 852	May 20	867 200	75.0	May 29	196 800	17.0
1980	May 30	2 154 172	May 27	1 544 300	71.7	May 29	632 000	29.3
1981	May 25	4 581 036	May 18	3 749 400	81.8	May 25	1 069 000	23.3
1982	Jul 08	1 584 800	Jun 18	913 400	57.6	Jul 07	184 300	11.6
1983	Jul 21	415 213	May 28	208 210	50.1	Jul 21	75 300	18.1
1984	Jun 26	116 190	Jun 16	88 380	76.1	Jun 23	17 030	14.7
1985				Incomplete Period				
1986				Incomplete Period				

The trend of higher sediment loads during the high discharge period is presented in Figure 21.

The range of sediment concentration sampled is from 2 to 8100 mg/L with the maximum occurring on June 23, 1975. Table 8 summarizes the extremes sampled for the April 1966 to October 1986 period.

Data for complete years exist for 12 years (1967 to 1978). By using the seasonal period of April to October, inclusive, the number of periods for analysis can be extended by six (Table 8). Additional data on loadings is presented in Appendix E. The seasonal mean concentration ranges greatly from 47 mg/L (1977) to 423 mg/L (1967). The maximum seasonal load was 7 480 000 tonnes for 1967 whereas the minimum seasonal load was 120 000 tonnes for 1977. The maximum concentration sampled of 8 100 mg/L occurred on June 23, 1975. The maximum daily load of 1 880 000 tonnes also occurred on June 23, 1975.

For the 18 years of seasonal data (April to October) the mean annual concentration is 233 mg/L and the mean load is 12 400 tonnes. The standard error of the mean is 20%. As shown in Table 8, little significant gain in accuracy can be expected if the record length is increased.

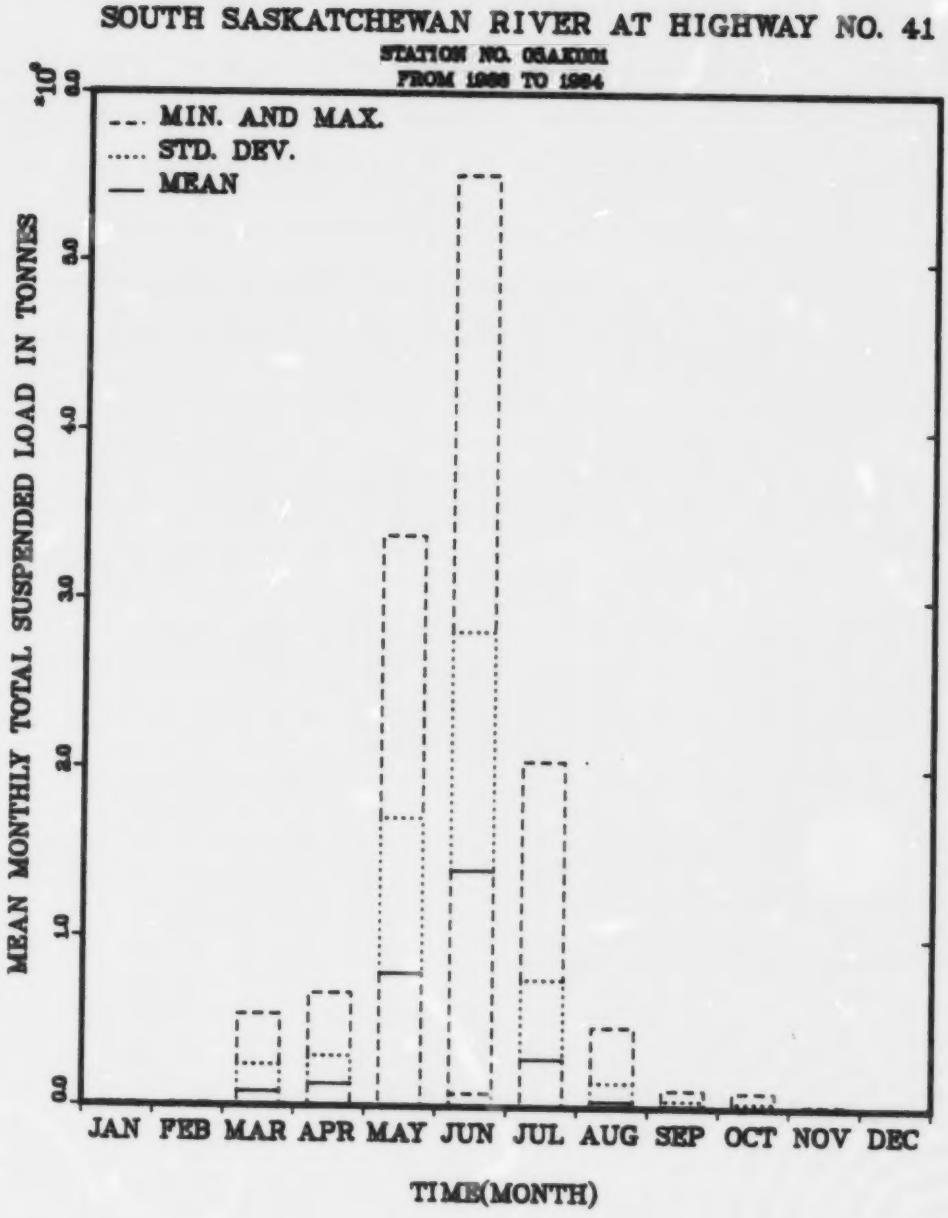

Figure 21. Distribution of mean monthly load in tonnes.

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Table 8. – Historical Sediment Data Summary

Year	Period of Operation Summary (JFMAMJJASOND)	Type of Sampling	Sampled Concentration		Suspended Sediment Load		Summary: Apr-Oct		
			Maximum (mg/L)	Minimum (mg/L)	Maximum Daily (Tonnes)	Total for Period Apr-Oct (Tonnes)	Mean Load Apr-Oct (Tonnes)	Historical Mean Load (Tonnes)	Standard Error of Mean %
1966	——PCCCCCCCC	Manual	1 960 Jun 08	8 Sep 19	195 000 Jun 08	2 430 000	—	—	—
1967	CCCCCCCCCCCC	Manual	3 880 May 11	5 Sep 06	564 000 Jun 03	7 480 000	34 700	34 700	—
1968	CCCCCCCCCCCC	Manual	2 020 Jun 09	3 Aug 11	107 000 Jun 09	1 180 000	5 330	20 000	73.4
1969	CCCCCCCCCCCC	Manual	3 290 Jun 30	4 Sep 23	452 000 Jul 02	4 550 000	20 500	20 200	42.0
1970	CCCCCCCCCCCC	Manual	3 740 Jun 17	2 Sep 06*	417 000 Jun 17	2 700 000	12 500	18 300	34.4
1971	CCCCCCCCCCCC	Manual	1 640 Jun 10	2 Sep 05	170 000 Jun 10	2 350 000	10 800	16 800	30.4
1972	CCCCCCCCCCCC	Manual	4 180 Mar 18	3 Jan 27	261 000 Jun 04	4 720 000	19 500	17 200	24.4
1973	CCCCCCCCCCCC	Manual	1 450 Jun 17	2 Jan 10	46 100 Jun 17	720 000	3 270	15 200	26.7
1974	CCCCCCCCCCCC	Manual	6 360 May 04	2 Oct 19	350 000 May 04	4 090 000	19 000	15 700	22.6
1975	CCCCCCCCCCCC	Manual	8 100 Jun 23*	2 Jan 07	1 880 000 Jun 23*	7 450 000	34 700	17 800	21.2
1976	CCCCCCCCCCCC	Manual	1 310 May 15	2 Sep 25	70 800 Aug 10	1 300 000	5 850	16 600	21.6
1977	CCCCCCCCCCCC	Manual	1 300 Jun 16	3 Apr 29	29 800 Jun 15	120 000	496	15 100	23.6
1978	CCCCCCCCCCCC	Manual	1 970 Jun 03	9 Aug 13	98 700 Jun 10	2 450 000	10 400	14 800	22.1
1979	——CCCCCCC—	Manual	1 720 May 30	2 Sep 01	102 000 May 30	1 160 000	5 400	14 000	22.1
1980	——CCCCCCC—	Manual	4 130 May 30	7 Sep 02	368 000 May 30	2 150 000	10 100	13 800	20.9
1981	—PCCCCCCCP–	Manual	4 430 May 19	11 Sep 22	579 000 May 25	4 590 000	21 400	14 300	19.1
1982	——PCCCCCC—	Manual	2 000 Jul 08	6 Sep 12	93 500 Jul 08	1 570 000	7 410	13 800	18.7
1983	—PCCCCCCC—	Manual	2 720 Jul 21	4 Sep 25	43 900 Jul 21	416 000	1 940	13 100	19.3
1984	——CCCCCCP—	Manual	527 Jun 26	5 May 05	9 100 Jun 26	118 000	552	12 400	20.0
1985	——PPPPPP—	Manual	457 Sep 17	5 Sep 09	—	—	—	—	—
1986	——PPPPPPP—	Manual	565 May 28	15 Aug 18	—	—	—	—	—

Manual – Manual Sampling

C = Complete Month P = Partial Month * – Extreme for Period of Record

The limited record length affects the precision of the estimates of mean concentration and load. The relationship between the standard error of estimate for the mean seasonal concentration and the record length is shown in Figure 22. A similar diagram for the seasonal load is shown in Figure 23. After 18 years of sample collection the standard error for the mean concentration is reduced to just over 10% and for the mean load the standard error is reduced to 20%. As can be seen by Figures 22 and 23, further extension of data would not substantially improve the standard error of estimate.

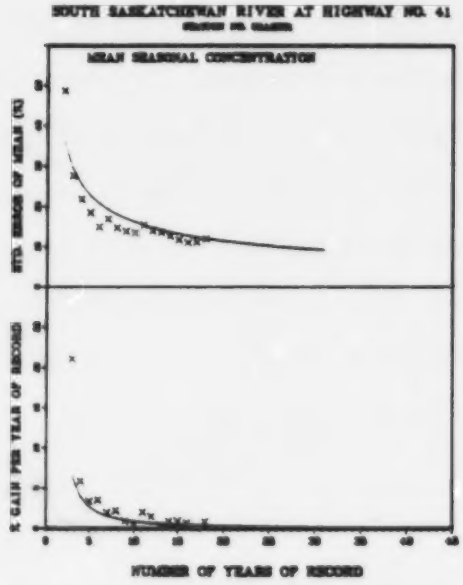

Figure 22. Relationship between standard error of mean and the mean concentration. The percent gain is shown in the lower portion.

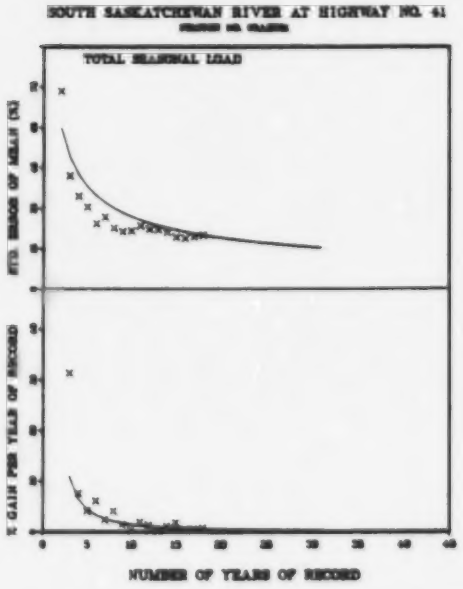

Figure 23. Relationship between standard error of mean and seasonal load. The percent gain is shown in the lower portion.

5.0 Supplementary Data

5.1 Hydraulic Data

Streamflow discharge measurements are made approximately every month from the catamaran. These measurements define the stage-discharge relation and define the deviation from this relation because of varying conditions such as weed growth, scour and sediment deposition. Hydraulic parameters, including mean velocity, channel width, mean depth and cross-sectional area, can be extracted from the measurement data (Figure 24). More specific information can be obtained upon request to Water Survey of Canada, Calgary District.

Figures 25 and 26 present cross sections derived from these data for this report. Figure 25 depicts the minor streambed changes which occurred during the 1975 season, while Figure 26 shows the changes which have taken place during the life of the station. The right bank side appears to undergo some seasonal changes, usually considerably less than one metre in depth. This can be attributed to the movement of bars past this portion of the cross section while on the left bank the cross section has remained constant.

5.2 Bed Material Data

Beginning in 1966 bed material samples were collected from the catamaran cross section utilizing either a Lane or a BM-54 sampler. Five to nine points, under the cableway, were sampled on each occasion.

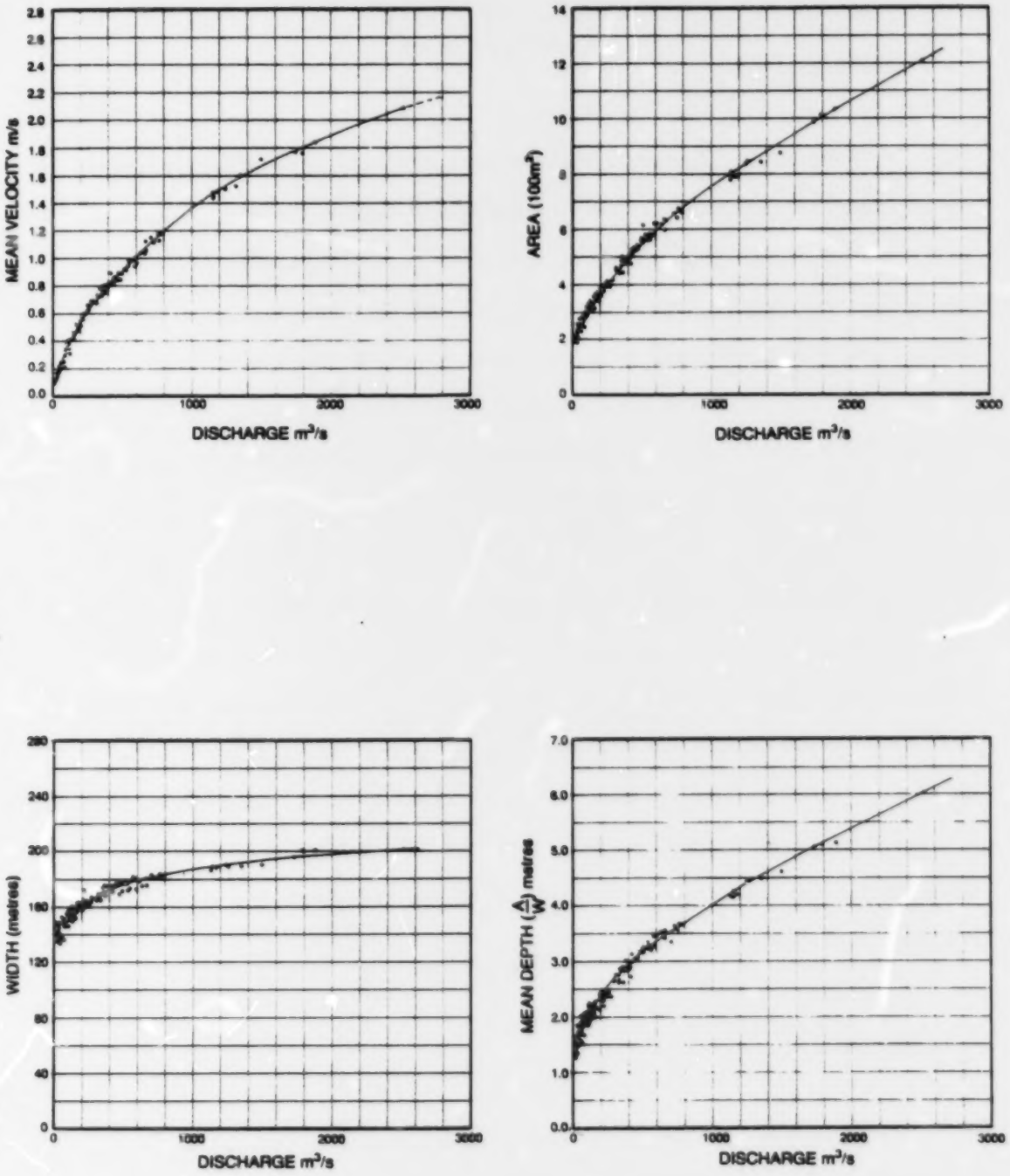

Figure 24. Cross-sectional hydraulic data

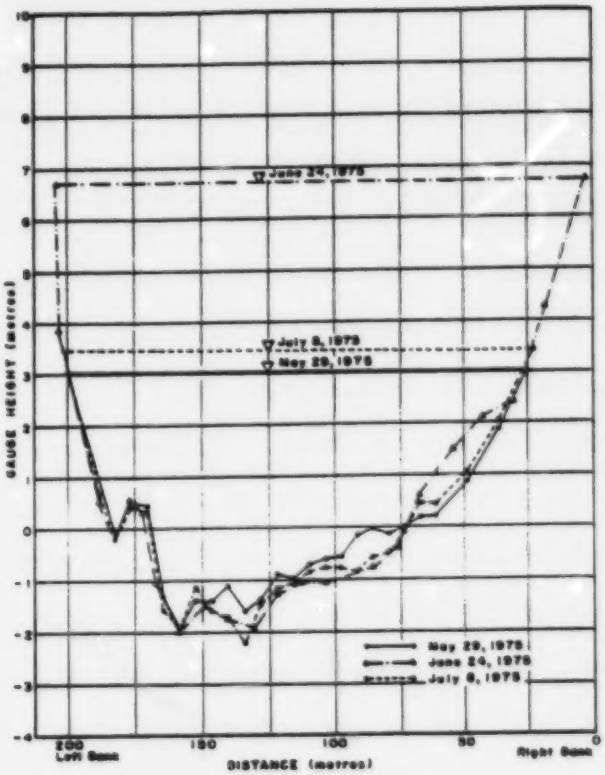

Figure 25. Cross section comparisons during the 1975 season at the catamaran crossing

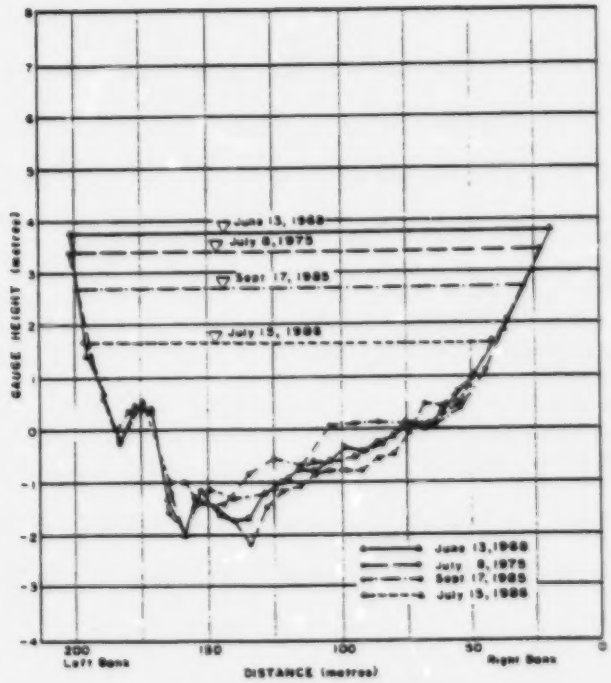

Figure 26. Cross section comparisons for the period of record (1968 to 1988) at the catamaran crossing.

A composite curve plot of 24 measurements collected from May 5, 1966 to October 3, 1978 is shown in Figure 27. The data for these measurements representing 149 samples are presented in Table 9. Additional data are presented in Appendix F. The particle size distribution given in this table is the average of the number of sample points for each measurement. These 24 measurements give an average D_{50} of 0.260 mm. However, there is a wide spread from 0.108 mm to 0.383 mm. Similarly, grading $[(D_{84}/D_{16})^{0.5}]$ ranges from 1.5 to 9.2. The majority of the samples are composed of fine and medium sand with a silt/clay content of less than 20%. The gravel fraction comprises about 15% in most cases but is as high as 60% for two of the measurements. Existing data adequately characterize the bed material particle gradations throughout the transect but it is not possible to see if there is a particle size variation from sample to sample in the cross section. This shortcoming, however, has been rectified in the 1984 annual sediment data publication, as bed material data are no longer combined.

In addition to the normal bed material samplings two bulk samples and a streambed surface sample were taken in October 1984. A streambed surface and one bulk sample were taken from a point bar on the right bank side a distance of 300 metres upstream of the gauge (see Photographs, Appendix H). The particle size distributions are reproduced in Figures 28 and 29 for the streambed surface and bulk samples respectively. A third bulk sample was also taken on the right bank side but directly under the catamaran cable at a chainage of 45 metres. The results for this bulk sample are detailed in Figure 30. During the spring of 1985, T. Yuzyk a member of the October 1984 survey team, returned to the South Saskatchevan

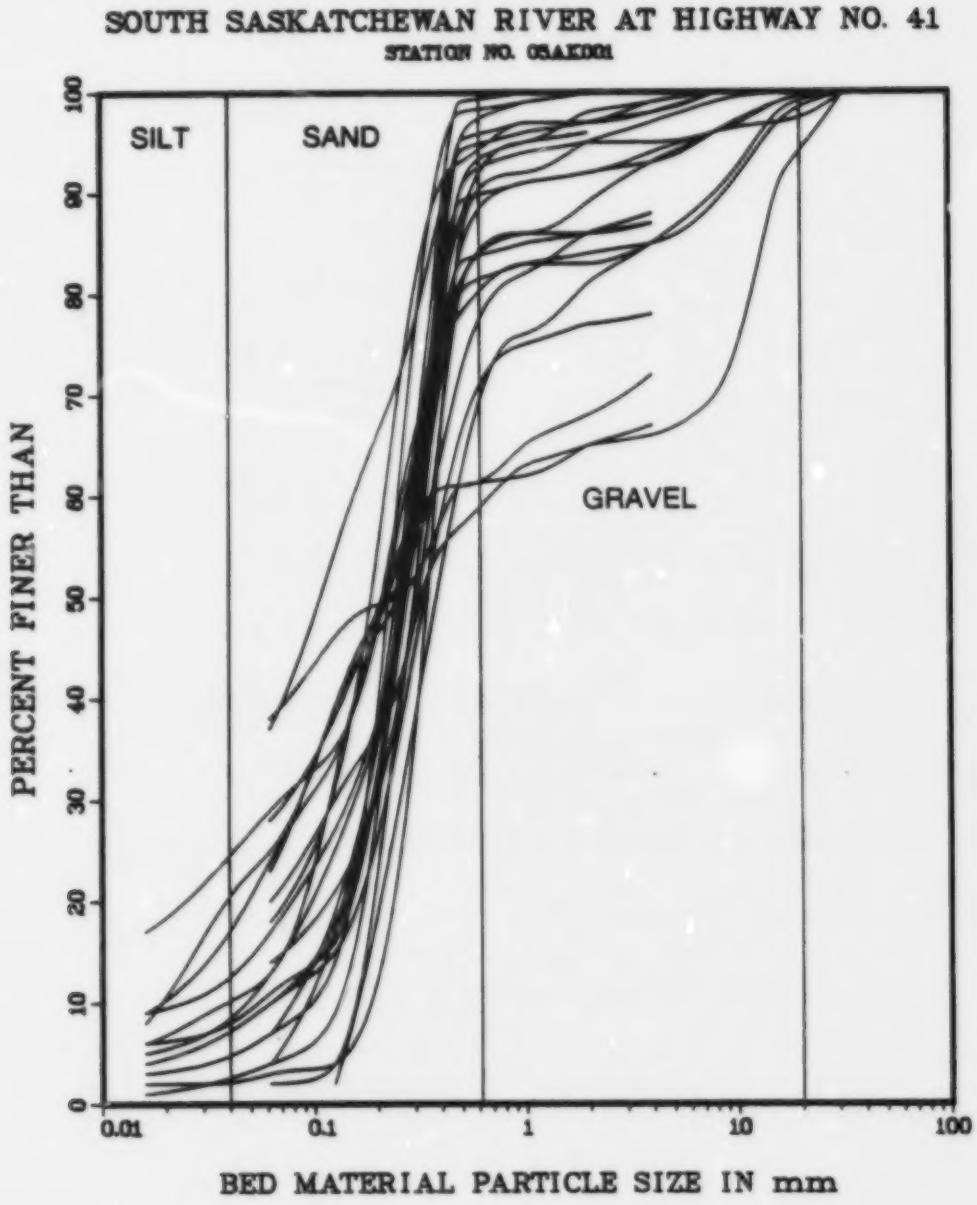

Figure 27. Composite plot of bed material particle size distribution.

Table 9 - Bed Material Particle Size Data, 1966 to 1978

Sample Identifier Date	Time	No. of Sample Points	Percent Finer Than Indicated Size, In Millimetres 0.016	0.031	0.062	0.125	0.25	0.50	1.00	2.00	4.00	8.00	16.0	32.0	64.0	Total D50	GDG	Type of Sampler
May 05 1966		8	06	08	13	32	53	84	91	92	94	96	99	100		0.223	2.6	Lane
Aug 17 1966		7	05	07	13	25	45	90	94	95	95	96	97	100		0.276	2.4	Lane
Oct 21 1966		7			10	18	44	83	85	86	87					0.276	2.4	Lane
May 04 1967		6			14	21	39	90	95	96	96					0.300	2.4	Lane
May 13 1967		7			20	30	41	80	86	86	87					0.312	*	[illegible]
May 27 1967		6			28	38	54	61	65	68	72					0.212	*	[illegible]
Jun 04 1967		8			38	46	50	61	62	65	67					0.250	*	Lane
Sep 19 1967		8			23	39	50	95	99	100						0.250	*	Lane
Nov 02 1967	1245	7	04	06	10	15	36	66	75	77	78					0.337	*	Lane
Apr 10 1968	1245	9	09	14	24	34	58	78	83	83	85					0.210	9.2	Lane
Jun 13 1968	1400	7	08	17	25	39	51	72	82	86	88					0.232	7.1	Lane
Sep 17 1968	1330	5	03	04	07	14	59	98	99	100	100					0.227	1.6	[illegible]
Apr 24 1969	1345	7			18	31	69	93	97	97	98	100				0.188	*	[illegible]
Jun 03 1969	1650	5			04	17	51	94	96	97	99	100				0.246	1.8	[illegible]
Jul 02 1969	1600	6			37	54	71	94	96	97	98	100				0.100	*	[illegible]
Sep 25 1969	0945	4			07	19	48	89	100							0.257	1.9	[illegible]
Jun 10 1970	1010	4			10	17	44	95	97	97	98	100				0.272	1.9	[illegible]
Jun 18 1970	1300	4			02	04	38	57	63	65	66	70	91	100		0.324	8.5	[illegible]
Jun 09 1971	1750	4				02	29	62	76	81	85	90	98	100		0.383	4.2	[illegible]
Jun 22 1972	1400	6	17	22	29	35	56	81	86	89	93	96	99	100		0.218	*	[illegible]
Sep 25 1973	1045	5	01	02	04	09	46	87	95	98	99	100				0.263	1.7	[illegible]
Sep 26 1974	1115	7	09	11	17	27	46	80	83	84	85	89	97	100		0.274	5.9	[illegible]
Sep 30 1975	1200	6	06	07	11	16	47	89	91	92	93	96	99	100		0.261	1.9	
Oct 03 1978	1600	6	02	02	03	04	23	85	92	95	97	99	100			0.346	1.5	[illegible]

GDG (Grading) = Square Root (D84/D16).

*Unable to compute due to insufficient data.

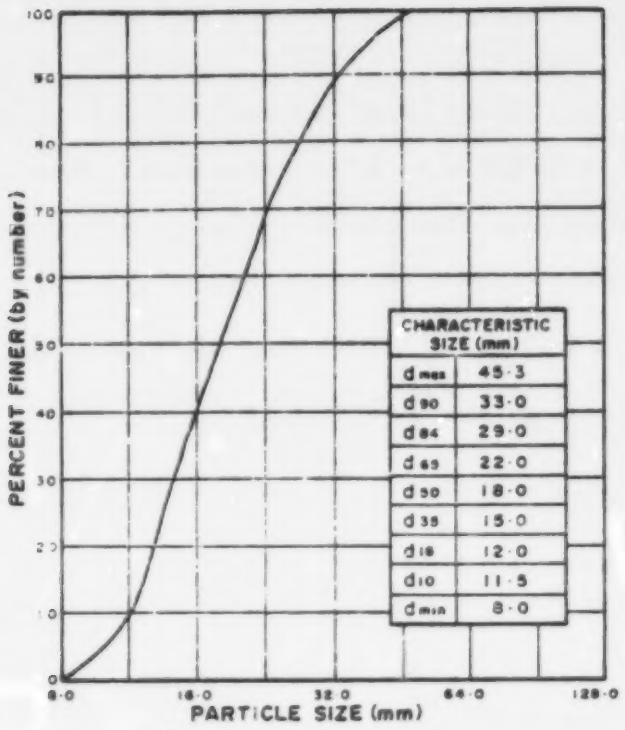

Figure 28. Particle size distribution for surface sample from point bar 300 metres above gauge.

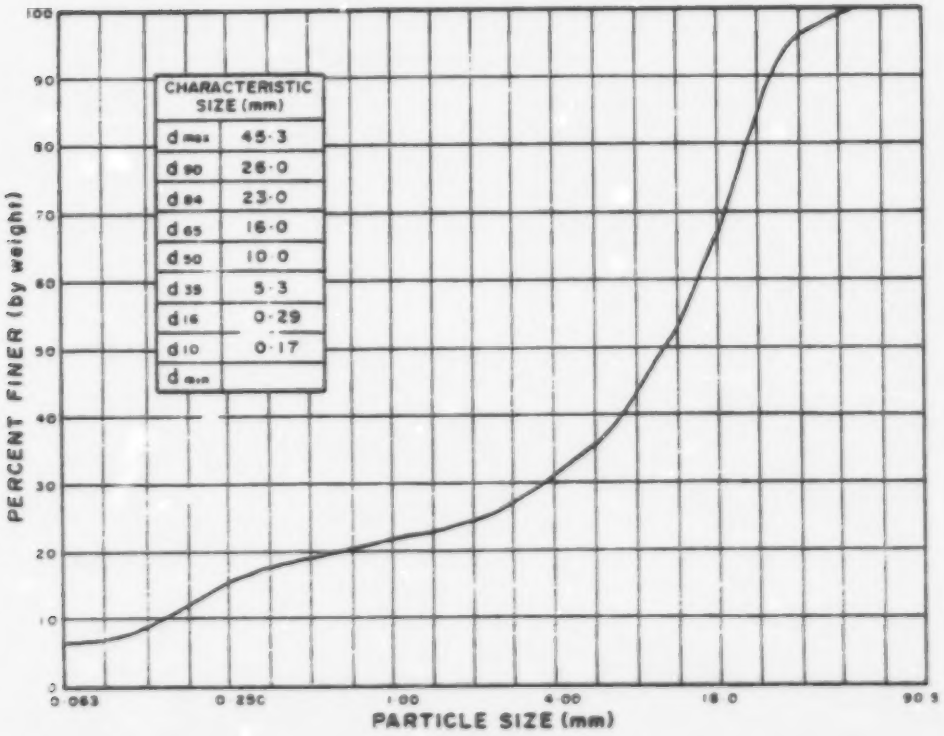

Figure 29. Particle size distribution of bulk sample from point bar 300 metres above gauge.

River at Highway No. 41 and found that the point bar was affected by armouring as it no longer was visible and presumed to be buried below a deposit of sand and silt. Details of the particle sizes of surface samples taken along the point bar are presented in Table 10.

Table 10 - Particle Size Data from Surface Sample of Point Bar (300 Metres above Gauge).

Sieve Diameter (mm)	No. of Stones	Weight (g)	Percent Finer by Number
45.3	2	427.4	98.98
32	20	1747.7	88.83
22.6	42	1343.9	67.51
16	54	647.7	40.10
11.3	60	265.4	9.64
8	19	45.7	0

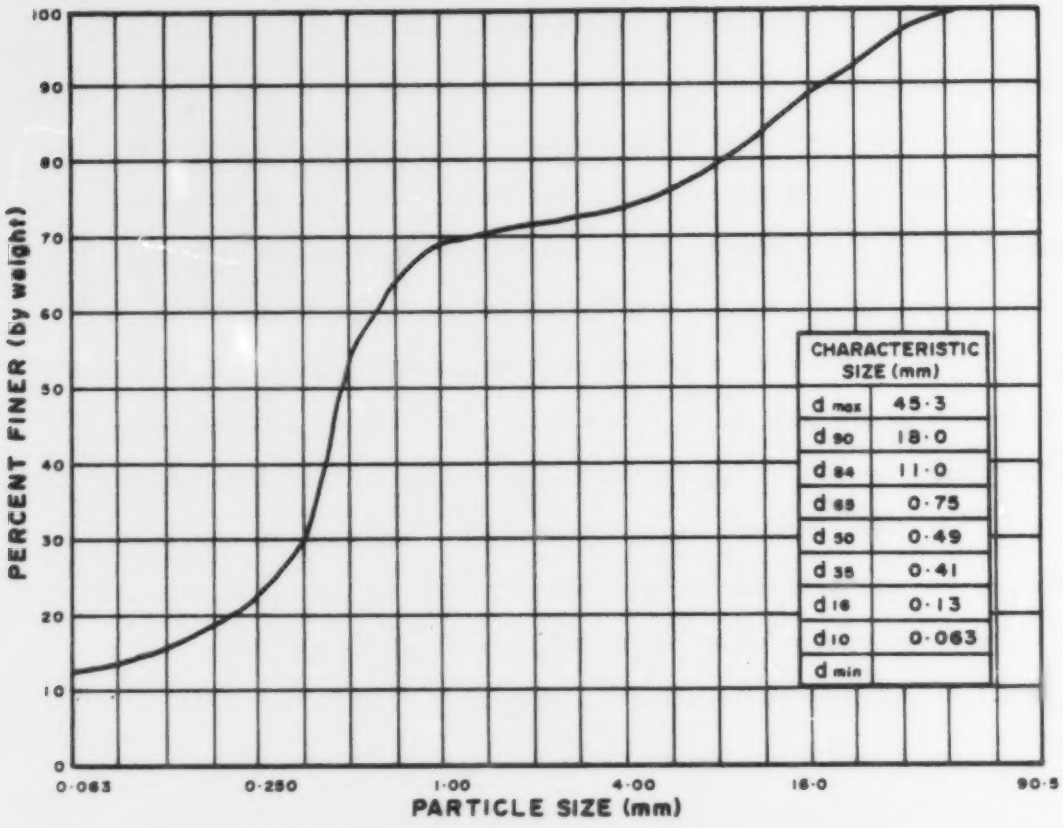

Figure 30. Particle size distribution of bulk sample from under the cableway at 45 metres chainage point

5.3 Dissolved Solids

Although these data do not provide information on specific chemical components, they are useful in computing total loads by including dissolved solids load with suspended load and bed load. These load calculations have not been done for the South Saskatchevan River at Highway No. 41. A study was conducted by HydroQual Consultants Inc. (1986) regarding total dissolved solids in the Saskatchevan River basin. Two of the objectives of the study were to summarize the total dissolved solids records for each site (South Saskatchevan River at Highway No. 41 being one of the sites) and to assess the suitability of the data for the calculation of geochemical load. This study found that at most sites, sampling for 10 years will produce estimates of mean total dissolved solids with a standard error of 10-15%. Sampling beyond this limit will not improve precision of the loading estimate.

Dissolved solids concentration, mg/L, versus daily mean discharge, m^3/s, for 1983 is illustrated by Figure 31. Similar illustrations for the periods 1966 to 1971 and 1977 to 1982 are contained in Appendix G. It is unknown why the data and plots for 1972 to 1976 are not available.

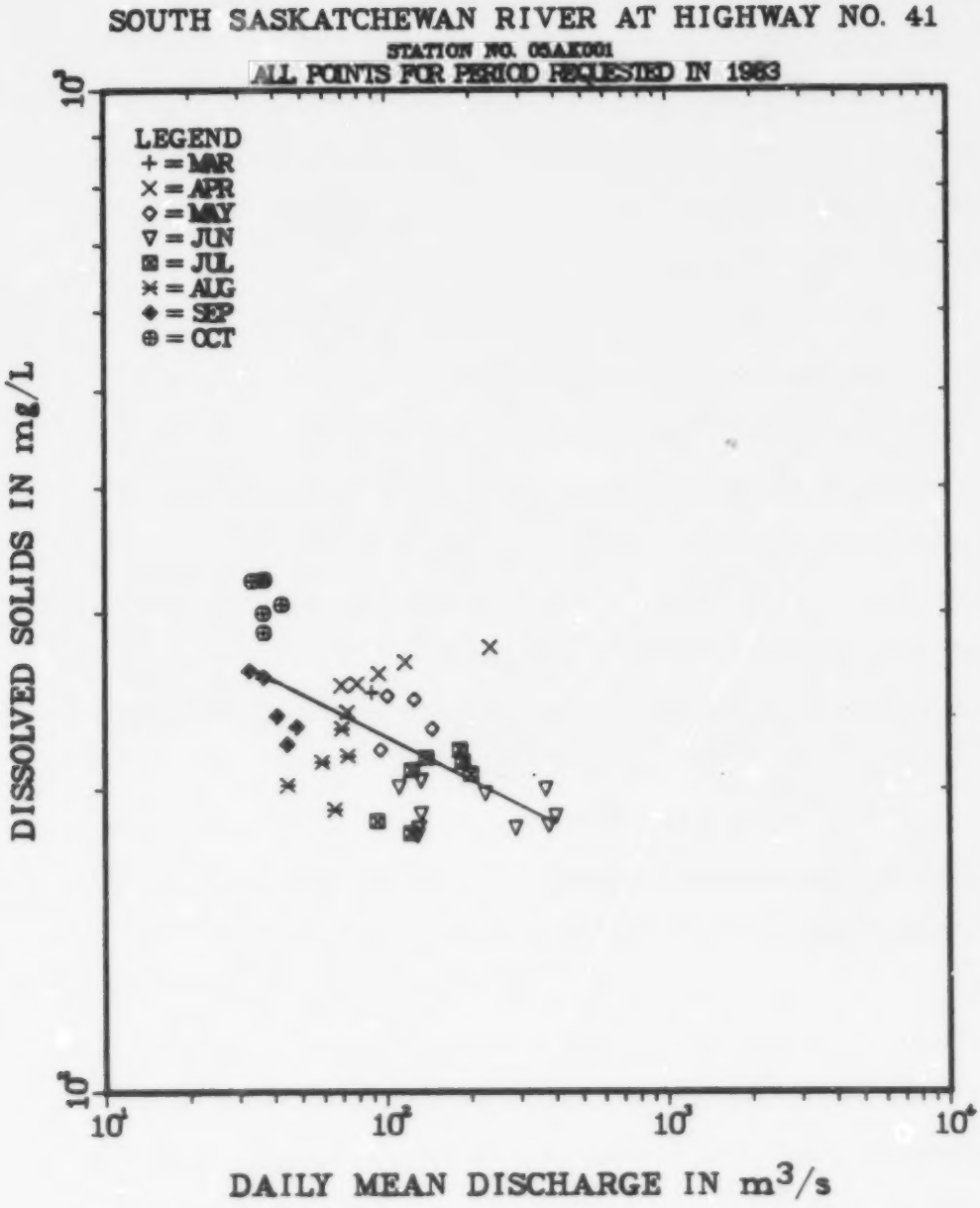

Figure 31. Total dissolved solids concentration versus daily mean discharge for 1983.

6.0 Program Evaluation and Recommendations

Results of this station reviev indicate that further intensive sample collection vill not improve the knovledge or overall understanding of the sediment transport for this site. This report indicates, in particular the following:

1. The range of sampled concentration is very good ranging from 2 to 8100 mg/L with the maximum occurring on June 23, 1975.
2. The annual and seasonal variability are vell documented and further presented in Table 8.
3. The estimates of the mean concentrations and mean load can be only improved slightly as shown in Table 8.
4. Sufficient data exists for most anticipated engineering needs.

Taking these points into consideration, it is recommended that the following be taken into consideration in the operation of the sediment station at the South Saskatchevan River near Highvay 41.

1. The detailed suspended sediment sampling program be suspended and the station discontinue operation as a continuous sediment data stations.
2. Continue sampling as a miscellaneous program station collecting sediment samples during every technician's visit and collecting samples at flov discharges that have not been sampled.
3. Samples for particle size distribution analysis be collected at low flows (< 100 m^3/s) and historical high flows (> 2000 m^3/s).
4. Support be given for specific studies to investigate the significance of such extreme events as occurred in 1975 and 1977.

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APPENDIX A

(Available upon request)

K-FACTOR VALUES FOR YEARS 1966 TO 1981

As no additional suspended-sediment measurements were collected K-Factor values for tye years 1982 to present are not available.

APPENDIX B

(Available upon request)

INSTANTANEOUS SUSPENDED-SEDIMENT DATA

Instantaneous data for 1966 to 1987 are listed for Depth-Integrating. These data were abstracted from the annual data computation books which are filed in the Calgary office of Water Resources Branch. The M symbol indicates a sampling vertical of a 5 vertical measurement.

APPENDIX C

(Available upon request)

ANNUAL SUSPENDED-SEDIMENT DATA HYDROGRAPHS

Days sampled are identified by the symbol "S".

Hydrographs are not available for 1985 and 1986 as loads were not determined for these years.

APPENDIX D

(Available upon request)

POINT-INTEGRATING PARTICLE SIZE DATA

Point-integrating data for thirteen measurements during the period 1966 to 1971 are included. Point integrating measurements were not taken after June 1971.

APPENDIX E

(Available upon request)

DAILY MEAN CONCENTRATION AND LOADING DATA 1966 TO 1984

(Loadings are not available for 1985, 1986 and 1987)

APPENDIX F

(Available upon request)

BED MATERIAL PARTICLE SIZE DATA 1966 TO 1978

The data includes 21 measurements consisting of at least one sample collected from the streambed at 5 verticals in the cross section.

APPENDIX G

(Available upon request)

DISSOLVED SOLIDS DIAGRAMS

(Plots are not available for 1972, 1973, 1974, 1975 and 1976)

APPENDIX H

(Available upon request)

PHOTOGRAPHS

Photographs showing bed material sampling

300 metres above the gauge.

List of Photographs

Photo 1: Gauge shelter and catamaran cable tower

Photo 2: Measuring cross section looking from right to left bank

Photo 3: Surface Bed Material sampling. Line on Point Bar, right bank, 300 metres above gauge

Photo 4: Surface Bed Material Sampling. Line on Point Bar, right bank, 300 metres above gauge

Photo 5: Bulk Sampling from Point Bar, right bank, 300 metres above gauge

Photo 6: Bulk Sampling from Point Bar, right bank, 300 metres above gauge

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SEDIMENT STATION ANALYSIS: SOUTH SASKATCHEWAN RIVER AT HIGHWAY No. 41 - 05AK001

APPENDICES

M.A. CASHMAN, M.O. SPITZER

Canada

Western and Northern Region

APPENDIX A

K-FACTOR VALUES FOR YEARS 1966 to 1981

As no additional suspended-sediment measurements were collected K-Factor values for the years 1982 to present are not available.

K-Factor Values for 1966

Date	Discharge m^3/s	Average Concentration mg/L	Single Vertical Concentration mg/L	K-Factor	Remarks
1966					
May 5	199	41	41	1.00	
May 9	233	31	43	0.72	ETR method
May 14	570	1094	1103	0.98	
May 26	407	230	230	1.00	
June 8	1150	2190	2033	1.08	
June 23	491	135	210	0.64	
July 21	380	199	172	1.15	
Aug 17	140	21	23	0.91	Used 1.0
Sept 16	136	9	16	0.56	Not used
Oct 21	119	27	29	0.93	Used 1.0
Dec 13	86	8	9	0.89	Used 1.0
1967					
Feb 3	98	11	14	0.79	Used 1.0
Apr 24	206	200	171	1.17	Used 1.0
May 4	192	250	252	0.99	
May 12	705	3262	3299	0.99	
May 26	1180	2721	2612	1.04	
June 4	1890	3098	2985	1.04	
June 9	1270	1048	938	1.11	
July 19	358	104	123	0.85	
Aug 23	112	7	12	0.58	Used 1.0
Sept 19	129	9	9	1.00	
Nov 2	73	7	5	1.40	Used 1.0
1968					
April 10	90	19	16	1.19	Used 1.0
May 9	464	683	737	0.94	
June 13	764	943	909	1.04	
July 4	354	166	194	0.86	
July 24	164	61	57	1.07	
Aug 29	133	13	20	0.65	Used 1.0
Sept 17	198	38	43	0.89	
Nov 13	215	59	69	0.86	

(Continued)

Date	Discharge m^3/s	Average Concentration mg/L	Single Vertical Concentration mg/L	K-Factor	Remarks
1969					
Jan 22	101	11	9	1.22	Used 1.0
Mar 19	111	32	27	1.19	Used 1.0
Apr 24	208	147	151	0.97	
Apr 29	317	231	238	0.97	
May 13	375	163	187	0.87	
May 30	640	635	716	0.89	
June 3	499	282	299	0.94	
June 24	471	196	245	0.80	
July 17	486	218	239	0.91	
Aug 27	90	7	7	1.00	
Sept 24	79	5	6	0.83	Used 1.0
Dec 17	60	6	7	0.86	Used 1.0
1970					
Feb 25	96	11	13	0.85	Used 1.0
Apr 28	146	49	46	1.07	
May 14	339	389	416	0.94	
May 26	450	484	454	1.06	
June 9	549	447	499	0.90	
June 18	1360	3059	940	1.04	
July 22	151	21	24	0.88	
Aug 26	69	6	7	0.86	Used 1.0
Sept 29	43	5	3	1.67	Used 1.0
Nov 3	133	18	20	0.90	Used 1.0
1971					
Mar 30	90	39	31	1.26	
May 4	215	117	136	0.86	
May 18	551	878	976	0.90	
June 9	1140	1601	1475	1.09	
July 22	158	17	16	1.05	
Aug 25	88	10	10	1.00	
Sept 30	47	2	1	2.00	Used 1.0
Oct 27	127	32	36	0.91	

(Continued)

Date	Discharge m^3/s	Average Concentration mg/L	Single Vertical Concentration mg/L	K-Factor	Remarks
1972					
Apr 27	173	76	83	0.91	
May 17	408	307	332	0.92	
May 31	755	805	814	0.99	
June 15	1150	1009	971	1.04	
June 22	677	375	493	0.76	
July 20	331	65	55	1.18	
Aug 30	253	49	61	0.81	
Sept 15	182	14	17	0.84	
1973					
May 2	123	20	20	1.00	
May 30	345	224	233	0.96	
June 26	328	158	177	0.89	
1974					
May 14	541	685	767	0.89	
June 11	664	520	618	0.84	
June 21	1250	1859	1750	1.06	
July 4	603	305	329	0.93	
1975					
May 29	450	303	317	0.96	
June 25	1790	2857	2752	1.04	
1976					
May 18	591	802	969	0.83	

(Concluded)

Date	Discharge m^3/s	Average Concentration mg/L	Single Vertical Concentration mg/L	K-Factor	Remarks
1978					
May 31	515	530	547	0.97	
June 14	780	930	885	1.05	
June 29	437	164	212	0.77	
July 27	238	69	79	0.88	
Oct 3	196	34	35	0.99	
1979					
May 29	668	1713	1736	0.99	
1980					
May 6	258	241	268	0.90	
May 27	291	396	835	0.48	Not used
June 25	435	199	263	0.76	
July 22	35	21	13	1.64	Used 1.0
Aug 26	82	12	11	1.06	Used 1.0
1981					
May 28	1500	1807	1564	1.16	
June 24	530	261	373	0.70	
July 22	384	114	124	0.92	
Aug 18	206	37	38	0.97	

APPENDIX B

INSTANTANEOUS SUSPENDED-SEDIMENT DATA

Instantaneous data for 1966 to 1987 are listed for Depth-Integrating. These data were abstracted from the annual data computation books which are filed in the Calgary office of Water Resources Branch. The M symbol indicates a sampling vertical of a 5 vertical measurement.

SOUTH SASKATCHEWAN RIVER AT HIGHWAY NO. 41

STATION NO. 05AK001

INSTANTANEOUS SUSPENDED SEDIMENT FOR 1966

DATE	TIME	WATER TEMP. (C)	INSTANT. DISCHARGE (M3/S)		SINGLE SAMPLING VERTICAL (M)		TYPE OF SAMPLER	INSTANT. CONCENT. (MG/L)	DISSOLVED SOLIDS (MG/L)	PERCENT FINER THAN INDICATED SIZE, IN MILLIMETRES .002	.004	.008	.016	.031	.062	.125	.250	.500	1.00	2.00	PERCENT SAND	SILT	CLAY
APR 28	14:00		235	H	122		D49	086	225														
APR 30	09:00		216	H	122		D49	073	236														
MAY 02	06:30		217	H	122		D49	068	250														
MAY 04	06:00		210	H	122		D49	046	232														
MAY 05	16:45	14.4	200	H	61.0	M	D49	041	229														
MAY 05	17:05	14.4	200	H	91.4	M	D49	045	229														
MAY 05	17:15	14.4	200	H	113	M	D49	042	228														
MAY 05	17:25	14.4	200	H	122	M	D49	041	229														
MAY 05	17:40	14.4	200	H	158	M	D49	035	233														
MAY 06	12:00E	15.0	204	H	122		D49	037	224														
MAY 08	12:00E	15.6	212	H	122		D49	026	208														
MAY 09	12:00E	16.7	233	H	122		D49	043	211														
MAY 09	19:00	16.7	233	H	MULT		D49	031	218														
MAY 11	08:30	13.3	379	H	122		D49	281	225	10	12	20	40	61	76	85	92	96	98	100	24	64	12
MAY 12	08:30	11.7	408	H	122		D49	434	224	13	19	35	59	76	84	90	96	98	99	100	16	65	19
MAY 14	16:00	12.2	161		158	M	P61	1010	216	13	21	32	50	71	90	98	100				10	69	21
MAY 14	16:30	12.2	109		122	M	P61	1090	207	10	17	28	43	63	81	88	93	96	98	100	19	64	17
MAY 14	16:35	12.2	555	H	122		P61	1110	209														
MAY 14	17:09	12.2	75.7		113	M	P61	1070	208	12	18	28	44	66	82	90	95	98	99	100	18	64	18
MAY 14	17:50	12.2	107		91.4	M	P61	1120	208	9	15	26	41	65	82	90	95	98	99	100	18	67	15
MAY 14	18:25	12.2	117		61.0	M	P61	1160	215	11	19	30	44	63	81	93	99	100			19	62	19
MAY 15	12:00E	10.0	555	H	122		D49	1220	203														
MAY 16	12:00E	10.6	538	H	122		D49	1050	191														
MAY 17	08:30	11.7	493	H	122		D49	893	198	8	16	28	42	54	65	75	84	92	96	100	35	49	16
MAY 18	12:00E	9.4	479	H	122		D49	532	190														
MAY 19	06:30	10.0	453	H	122		D49	399	195														
MAY 20	06:15	11.1	439	H	122		D49	295	208														
MAY 21	06:45	12.8	408	H	122		D49	264	200														
MAY 22	08:00	13.3	391	H	122		D49	250	198														
MAY 23	06:30	12.8	385	H	122		D49	295	200														
MAY 24	06:15	13.3	377	H	122		D49	253	199														
MAY 25	06:30	13.3	419	H	122		D49	219	207														
MAY 26	06:00	14.4	433	H	122		D49	230	200														
MAY 26	15:30	17.8	433	H	158	M	D49	195	192														
MAY 26	15:40	17.8	433	H	122	M	D49	234	193														
MAY 26	15:50	17.8	433	H	122		D49	227	196														
MAY 26	16:00	17.8	433	H	113	M	D49	282	186														
MAY 26	16:10	17.8	433	H	91.4	M	D49	266	194														
MAY 26	16:20	17.8	433	H	61.0	M	D49	203	205														
MAY 27	06:15	16.1	396	H	122		D49	242	191														
MAY 28	06:00	17.8	351	H	122		D49	208	181														

NOTE :

TIME SYMBOL: E - ESTIMATED
DISCHARGE SYMBOL(S): H - DAILY MEAN
VERTICAL SYMBOL(S): M - A SEDIMENT MEASUREMENT VERTICAL

(CONTINUED)

SOUTH SASKATCHEWAN RIVER AT HIGHWAY NO. 41

STATION NO. 05AK001

INSTANTANEOUS SUSPENDED SEDIMENT FOR 1966

(CONTINUED)

DATE	TIME	WATER TEMP. (C)	INSTANT. DISCHARGE (M3/S)		SINGLE SAMPLING VERTICAL (M)		TYPE OF SAMPLER	INSTANT. CONCENT. (MG/L)	DISSOLVED SOLIDS (MG/L)	PERCENT FINER THAN INDICATED SIZE, IN MILLIMETRES .002	.004	.008	.016	.031	.062	.125	.250	.500	1.00	2.00	PERCENT SAND	SILT	CLAY
MAY 29	10:00	18.9	348	H	122		D49	176	172														
MAY 30	06:00	19.4	416	H	122		D49	236	181														
MAY 31	08:30	17.8	487	H	122		D49	364	179	12	17	27	38	49	65	82	93	97	99	100	35	48	17
JUN 01	14:30	16.7	561	H	122		D49	830	178														
JUN 02	07:30	15.6	575	H	122		D49	804	173														
JUN 03	08:30	13.9	685	H	122		D49	703	166	16	26	39	54	69	82	91	97	99	100		18	56	26
JUN 04	08:30	13.3	821	H	122		D49	1250	182	11	18	27	41	60	82	93	98	99	100		18	64	18
JUN 04	08:45	13.3	821	H	122		D49	1280	181														
JUN 05	08:00	12.2	841	H	122		D49	1240	184														
JUN 05	08:30	12.2	841	H	122		D49	1250	188	11	18	28	41	59	79	93	99	100			21	61	18
JUN 06	07:30	12.8	833	H	122		D49	1130	182														
JUN 06	08:00	12.8	833	H	122		D49	1030	183	9	17	26	39	55	76	93	99	100			24	59	17
JUN 07	07:00	12.2	1030	H	122		D49	1030	187														
JUN 07	07:30	12.2	1030	H	122		D49	992	180														
JUN 08	17:00	14.4	148		174	M	P61	1910	215	12	21	34	53	73	93	100					7	72	21
JUN 08	17:35	14.4	250		146	M	P61	2110	195	14	22	34	49	68	86	96	99	100			14	64	22
JUN 08	18:20	14.4	304		113	M	P61	2090	203	14	22	33	48	67	85	95	99	100			15	63	22
JUN 08	19:05	14.4	244		82.3	M	P61	2480	213	9	15	25	40	56	73	87	95	99	100		27	58	15
JUN 08	20:20E	14.4	1150	H	122		P61	2030	205														
JUN 08	18:20E	14.4	1150	H	113	M	P61	2090	203														
JUN 08	19:05E	14.4	1150	H	82.3	M	P61	2480	213														
JUN 08	20:30	14.4	200		54.9	M	P61	2300	208	11	19	28	42	60	78	88	95	98	99	100	22	59	19
JUN 09	05:45	14.4	1100	H	122		D49	1730	191	14	24	36	52	69	86	97	100				14	62	24
JUN 09	17:30	15.0	1100	H	122		D49	1400	192														
JUN 10	09:00	15.6	977	H	122		D49	1290	191	20	30	42	55	68	82	94	99	100			18	52	30
JUN 10	17:30	16.1	977	H	122		D49	1570	196														
JUN 11	05:45	15.6	898	H	122		D49	877	187														
JUN 11	16:30	16.1	898	H	122		D49	853	196														
JUN 12	08:00	15.6	867	H	122		D49	740	187														
JUN 13	06:30	15.0	892	H	122		D49	727	175	13	17	26	39	50	64	80	92	97	99	100	36	47	17
JUN 13	17:00	15.6	892	H	122		D49	705	184														
JUN 14	06:00	15.0	881	H	122		D49	746	183														
JUN 14	19:30	16.1	881	H	122		D49	653	182														
JUN 15	06:15	15.0	833	H	122		D49	665	174														
JUN 16	06:30	17.8	770	H	122		D49	502	177	20	22	32	46	55	68	82	94	98	99	100	32	46	22
JUN 17	06:00	16.7	691	H	122		D49	514	182														
JUN 23	08:00	18.3	513	H	122		D49	225	184														
JUN 23	19:00	19.4	513	H	122		D49	210	188														
JUN 23	20:50	19.4	513	H	MULT		D49	135	179														
JUN 26	13:30	17.2	484	H	122		D49	582	188														
JUN 28	08:00	18.9	433	H	122		D49	211	178	22	25	36	48	58	67	75	88	94	97	100	33	42	25

NOTE :

TIME SYMBOL: E - ESTIMATED
DISCHARGE SYMBOL(S): H - DAILY MEAN
VERTICAL SYMBOL(S): M - A SEDIMENT MEASUREMENT VERTICAL

(CONTINUED)

SOUTH SASKATCHEWAN RIVER AT HIGHWAY NO. 41

STATION NO. 05AK001

INSTANTANEOUS SUSPENDED SEDIMENT FOR 1966

(CONTINUED)

DATE	TIME	WATER TEMP. (C)	INSTANT. DISCHARGE (M3/S)		SINGLE SAMPLING VERTICAL (M)		TYPE OF SAMPLER	INSTANT. CONCENT. (MG/L)	DISSOLVED SOLIDS (MG/L)	PERCENT FINER THAN INDICATED SIZE, IN MILLIMETRES .002	.004	.008	.016	.031	.062	.125	.250	.500	1.00	2.00	PERCENT SAND	SILT	CLAY
JUN 30	15:45	20.0	360	H	122		D49	169	184														
JUL 02	13:30		317	H	122		D49	2210	193	21	34	54	67	84	96	99	100				4	62	34
JUL 04	08:00		368	H	122		D49	140	176														
JUL 06	06:30		544	H	122		D49	188	174														
JUL 07	06:45		640	H	122		D49	1120	190	34	43	58	73	80	86	91	96	98	99	100	14	43	43
JUL 08	19:30		617	H	122		D49	574	190	25	35	48	60	71	75	84	92	96	97	100	25	40	35
JUL 09	06:00		569	H	122		D49	520	201	23	33	43	53	61	68	80	89	94	97	100	32	35	33
JUL 10	15:30		498	H	122		D49	300	205	26	36	48	59	68	74	84	94	98	99	100	26	38	36
JUL 11	05:30		462	H	122		D49	279	192	26	30	44	58	66	71	82	95	99	100		29	41	30
JUL 13	07:30		476	H	122		D49	173	197														
JUL 14	17:00		470	H	122		D49	183	196														
JUL 15	06:30		377	H	122		D49	192	189														
JUL 16	06:30		493	H	122		D49	178	187														
JUL 17	18:00		501	H	122		D49	272	184														
JUL 18	06:00		447	H	122		D49	285	186														
JUL 20	05:45	22.8	391	H	122		D49	416	184	32	44	64	81	86	90	95	98	100			10	46	44
JUL 21	11:40	23.3	371	H	162	M	D49	149	190														
JUL 21	12:00E	23.3	371	H	134	M	D49	154	177														
JUL 21	12:20E	23.3	371	H	122		D49	172	188														
JUL 21	12:30E	23.3	371	H	114	M	D49	205	182														
JUL 21	12:40E	23.3	371	H	91.4	M	D49	173	177														
JUL 21	13:00	23.3	371	H	64.0	M	D49	305	180														
JUL 22	07:00	20.6	328	H	122		D49	128	194														
JUL 24	18:00	21.1	240	H	122		D49	093	182														
JUL 26	07:00	20.6	230	H	122		D49	428	180														
JUL 28	05:00	21.7	237	H	122		D49	548	187	31	43	60	81	92	97	98	99	100			3	54	43
JUL 29	05:00	20.6	232	H	122		D49	200	184														
AUG 01	08:00	22.8	214	H	122		D49	42	184														
AUG 03	13:30	26.1	188	H	122		D49	33	175														
AUG 05	19:00	21.7	148	H	122		D49	39	185														
AUG 07	19:15	21.1	146	H	122		D49	57	187														
AUG 09	06:15	19.4	151	H	122		D49	22	194														
AUG 12	18:30	20.0	192	H	122		D49	54	216														
AUG 14	17:00	20.6	171	H	122		D49	35	198														
AUG 16	07:30	21.1	155	H	122		D49	22	194														
AUG 17	17:20	23.3	145	H	158	M	D49	18	189														
AUG 17	17:35	23.3	145	H	134	M	D49	22	186														
AUG 17	17:50	23.3	145	H	122		D49	23	186														
AUG 17	18:05	23.3	145	H	116	M	D49	24	198														
AUG 17	18:20	23.3	145	H	94.5	M	D49	22	200														
AUG 17	18:30	23.3	145	H	70.1	M	D49	18	196														

NOTE :

TIME SYMBOL: E - ESTIMATED
DISCHARGE SYMBOL(S): H - DAILY MEAN
VERTICAL SYMBOL(S): M - A SEDIMENT MEASUREMENT VERTICAL

(CONTINUED)

SOUTH SASKATCHEWAN RIVER AT HIGHWAY NO. 41

STATION NO. 05AK001

INSTANTANEOUS SUSPENDED SEDIMENT FOR 1966

(CONTINUED)

DATE	TIME	WATER TEMP. (C)	INSTANT. DISCHARGE (M3/S)		SINGLE SAMPLING VERTICAL (M)	TYPE OF SAMPLER	INSTANT. CONCENT. (MG/L)	DISSOLVED SOLIDS (MG/L)	PERCENT FINER THAN INDICATED SIZE, IN MILLIMETRES .002	.004	.008	.016	.031	.062	.125	.250	.500	1.00	2.00	PERCENT SAND	SILT	CLAY
AUG 19	11:00	17.2	133	H	122	D49	27	193														
AUG 21	17:00	16.7	130	H	122	D49	42	202														
AUG 22	19:00	18.3	115	H	122	D49	20	193														
AUG 24	05:30	16.7	124	H	122	D49	157	214														
AUG 26	05:30	18.3	132	H	122	D49	027	218														
AUG 28	13:30	20.0	134	H	122	D49	020	213														
AUG 29	05:00	17.8	129	H	122	D49	020	210														
AUG 31	05:00	16.7	141	H	122	D49	020	204														
SEP 02	05:45	17.8	174	V	122	D49	014	197														
SEP 04	18:30	20.0	206	V	122	D49	061	197														
SEP 05	05:45	17.8	188	V	122	D49	050	196														
SEP 07	06:00	18.9	163	V	122	D49	028	195														
SEP 09	09:00	17.2	135	V	122	D49	017	193														
SEP 11	19:00	21.1	122	V	122	D49	009	190														
SEP 12	18:30	17.8	116	V	122	D49	010	192														
SEP 14	06:00	15.6	127	V	122	D49	012	205														
SEP 16	12:00	14.4	135	H	122	D49	016	205														
SEP 16	12:50	14.4	135	H	MULT	D49	009	204														
SEP 16	18:45	15.6	135	H	122	D49	016	211														
SEP 18	06:30	17.8	107	H	122	D49	010	214														
SEP 19	15:30	18.3	80.4	H	122	D49	008	211														
SEP 21	09:00	15.6	103	H	122	D49	010	211														
SEP 23	08:30	16.1	98.3	H	122	D49	011	223														
SEP 25	13:00	13.3	98.8	H	122	D49	008	208														
SEP 26	14:30	13.9	96.3	H	122	D49	017	208														
SEP 28	13:00	13.3	91.5	H	122	D49	009	217														
OCT 01	13:30	11.7	112	H	122	D49	011	210														
OCT 03	09:00	10.0	108	H	122	D49	011	223														
OCT 05	08:30	9.4	100	H	122	D49	009	228														
OCT 07	08:00	12.2	75.6	H	122	D49	008	225														
OCT 09	14:30	10.0	67.7	H	122	D49	011	200														
OCT 10	08:00	8.3	77.6	H	122	D49	007	200														
OCT 12	08:30	7.2	95.1	H	122	D49	014	214														
OCT 14	09:30	5.0	88.9	H	122	D49	021	219														
OCT 16	13:30	5.6	83.8	H	122	D49	035	211														
OCT 17	13:00	4.4	97.7	H	122	D49	007	232														
OCT 19	13:00	5.0	127	H	122	D49	019	242														

NOTE :

DISCHARGE SYMBOL(S): H - DAILY MEAN V - DAILY MEAN; MANUAL GAUGE V - DAILY MEAN; ESTIMATED

(CONTINUED)

SOUTH SASKATCHEWAN RIVER AT HIGHWAY NO. 41

STATION NO. 05AK001

INSTANTANEOUS SUSPENDED SEDIMENT FOR 1966

(CONTINUED)

DATE	TIME	WATER TEMP. (C)	INSTANT. DISCHARGE (M3/S)		SINGLE SAMPLING VERTICAL (M)		TYPE OF SAMPLER	INSTANT. CONCENT. (MG/L)	DISSOLVED SOLIDS (MG/L)	PERCENT FINER THAN INDICATED SIZE, IN MILLIMETRES .002	.004	.008	.016	.031	.062	.125	.250	.500	1.00	2.00	PERCENT SAND	SILT	CLAY
OCT 21	10:45	5.0	136	H	157	M	D49	024	259														
OCT 21	10:55	5.0	136	H	134	M	D49	028	256														
OCT 21	11:05	5.0	136	H	122		D49	029	258														
OCT 21	11:15	5.0	136	H	116	M	D49	030	258														
OCT 21	11:25	5.0	136	H	97.5	M	D49	028	261														
OCT 21	11:40	5.0	136	H	71.6	M	D49	026	259														
OCT 25	08:30	5.6	105	H	122		D49	046	208														
OCT 29	09:30	4.4	117	H	122		D49	014	261														
OCT 31	09:00	5.0	116	H	122		D49	013	262														
NOV 02	09:30	3.3	124	H	122		D49	014	263														
NOV 04	09:15	1.7	133	H	122		D49	013	259														
DEC 13	12:15	0.0	81.6	W	122		DH59	009	300														
DEC 13	12:40	0.6	81.6	W	MULT		DH59	008	301														
DEC 16	10:30	0.0	101	W	122		D49	014	311														
DEC 24	11:00	0.0	119	W	122		D49	019	258														
DEC 30	10:30	0.0	94.9	W	122		D49	015	265														

NOTE :

DISCHARGE SYMBOL(S): H - DAILY MEAN W - DAILY MEAN; ICE CONDITIONS
VERTICAL SYMBOL(S): M - A SEDIMENT MEASUREMENT VERTICAL

SOUTH SASKATCHEWAN RIVER AT HIGHWAY NO. 41

STATION NO. 05AK001

INSTANTANEOUS SUSPENDED SEDIMENT FOR 1967

DATE	TIME	WATER TEMP. (C)	INSTANT. DISCHARGE (M3/S)		SINGLE SAMPLING VERTICAL (M)		TYPE OF SAMPLER	INSTANT. CONCENT. (MG/L)	DISSOLVED SOLIDS (MG/L)	PERCENT FINER THAN INDICATED SIZE, IN MILLIMETRES .002	.004	.008	.016	.031	.062	.125	.250	.500	1.00	2.00	PERCENT SAND	SILT	CLAY
JAN 07	12:30	0.0	70.2	W	122		D49	018	294														
JAN 13	10:15	0.0	76.5	W	122		D49	011	303														
JAN 20	10:00	0.0	81.6	W	122		DH59	011	302														
JAN 27	10:45	0.0	85.5	W	122		DH59	015	296														
FEB 03	12:00	0.0	97.7	W	MULT		DH48	011	281														
FEB 03	12:35	0.0	97.7	W	122		DH48	014	284														
FEB 04	10:00	0.0	99.1	W	122		DH59	016	281														
FEB 10	09:45	0.0	93.4	W	122		D49	022	248														
FEB 21	10:30	0.0	90.9	W	122		D49	013	262														
FEB 28	10:00	0.0	101	W	122		D49	015	264														
MAR 04	09:30	0.0	140	W	122		D49	116	210														
MAR 09	13:00	0.0	158	W	122		DH48	064	224														
MAR 09	12:30	0.0	158	W	MULT		DH48	060	235														
MAR 10	10:45	0.6	136	W	122		DH59	045	240														
MAR 17	10:15	1.7	99.1	W	122		DH59	024	254														
APR 24	19:00	5.6	39.8		158	M	D49	216	249	47	57	79	93	96	99	100					1	42	57
APR 24	19:05	5.6	45.2		134	M	D49	184	245	50	61	78	90	96	97	99	100				3	36	61
APR 24	19:10E	5.6	210	H	122		D49	171	242														
APR 24	19:15	5.6	43.1		116	M	D49	214	237	44	56	69	78	82	84	87	92	96	98	100	16	28	56
APR 24	19:20	5.6	36.9		94.5	M	D49	194	247	41	52	65	80	86	88	90	94	97	98	100	12	36	52
APR 24	19:35	5.6	41.5		70.1	M	D49	194	254	43	54	71	86	93	97	98	99	100			3	43	54
APR 27	09:30	6.1	205	H	122		D49	209	248														
APR 29	10:30	3.9	214	H	122		D49	421	266	47	57	71	85	93	96	97	98	99	100		4	39	57
APR 30	09:45	4.4	214	H	122		DH59	233	255														
MAY 01	14:00	5.0	223	H	122		DH59	564	277														
MAY 02	08:00	3.3	238	H	122		D49	306	268	36	48	61	76	85	90	92	96	98	99	100	10	42	48
MAY 03	07:45	4.4	230	H	122		DH59	312	274														
MAY 04	07:00	5.0	213	H	122		DH59	228	284														
MAY 04	13:25E	6.7	213	H	160	M	P61	242	302														
MAY 04	13:55E	6.7	213	H	134	M	P61	247	299														
MAY 04	13:58E	6.7	213	H	122		P61	252	304														
MAY 04	14:20E	6.7	213	H	116	M	P61	254	294														
MAY 04	14:50E	6.7	213	H	94.5	M	P61	255	304														
MAY 04	15:45	6.7	213	H	70.1	M	P61	247	302														
MAY 05	06:00	6.1	214	H	122		D49	168	294														
MAY 06	06:00	10.0	233	H	122		D49	172	306														
MAY 07	11:30	10.6	237	H	122		D49	232	325														
MAY 08	06:30	11.1	263	H	122		D49	258	328														
MAY 09	07:00	9.4	279	H	122		D49	506	337	25	36	55	75	83	87	89	93	97	99	100	13	51	36
MAY 10	07:30	6.1	476	H	122		D49	673	343														
MAY 11	06:30	7.2	742	H	122		D49	3780	391														

NOTE :

TIME SYMBOL: E - ESTIMATED
DISCHARGE SYMBOL(S): H - DAILY MEAN W - DAILY MEAN; ICE CONDITIONS
VERTICAL SYMBOL(S): M - A SEDIMENT MEASUREMENT VERTICAL

(CONTINUED)

SOUTH SASKATCHEWAN RIVER AT HIGHWAY NO. 41

STATION NO. 05AK001

INSTANTANEOUS SUSPENDED SEDIMENT FOR 1967

(CONTINUED)

DATE	TIME	WATER TEMP. (C)	INSTANT. DISCHARGE (M3/S)		SINGLE SAMPLING VERTICAL (M)		TYPE OF SAMPLER	INSTANT. CONCENT. (MG/L)	DISSOLVED SOLIDS (MG/L)	PERCENT FINER THAN INDICATED SIZE, IN MILLIMETRES .002	.004	.008	.016	.031	.062	.125	.250	.500	1.00	2.00	PERCENT SAND	SILT	CLAY
MAY 12	06:45	8.9	731	H	122		D49	3860	347	8	12	30	50	70	89	95	98	99	99	100	11	77	12
MAY 12	18:10E	7.8	731	H	168	M	P61	3250	337														
MAY 12	18:55E	7.8	731	H	140	M	P61	3230	355														
MAY 12	19:20	7.8	731	H	122		D49	2870	347	16	25	40	60	78	91	95	97	98	99	100	9	66	25
MAY 12	20:30	7.8	731	H	113	M	P61	3300	344														
MAY 13	05:45	6.7	663	H	122		D49	2760	312	12	23	42	63	82	90	95	98	99	99	100	10	67	23
MAY 13	09:55E	7.8	663	H	88.4	M	P61	2710	308														
MAY 13	10:30	7.8	663	H	57.9	M	P61	2820	313														
MAY 13	05:45	6.7	663	H	122		D49	2760	309														
MAY 14	09:30	10.6	501	H	122		D49	1290	282														
MAY 15	08:00	7.8	473	H	122		D49	810	278														
MAY 16	05:30	10.6	527	H	122		D49	841	288														
MAY 17	06:00	12.2	549	H	122		D49	709	306														
MAY 18	05:45	12.8	609	H	122		D49	1230	322														
MAY 19	06:00	13.3	702	H	122		D49	1240	322														
MAY 20	09:30	16.1	807	H	122		D49	1560	285														
MAY 20	16:00	17.2	807	H	122		D49	1870	276	13	21	31	44	64	84	95	99	100			16	63	21
MAY 21	15:00	17.2	847	H	122		D49	2060	257														
MAY 21	19:00	17.8	847	H	122		D49	2060	236														
MAY 22	09:15	16.1	838	H	122		D49	2210	223														
MAY 22	18:30	17.8	838	H	122		D49	1790	215														
MAY 23	08:00	16.1	883	H	122		D49	1610	214														
MAY 23	18:30	17.8	883	H	122		D49	1480	217														
MAY 24	06:40	15.6	977	H	122		D49	1790	211														
MAY 24	20:00	16.7	977	H	122		D49	1810	211	14	18	28	40	57	81	97	100				19	63	18
MAY 25	07:30	12.2	1080	H	122		D49	2330	215														
MAY 25	18:45	15.0	1080	H	122		D49	2890	213														
MAY 26	07:00	12.8	1150	H	122		D49	2880	210														
MAY 26	18:30E	14.4	1150	H	54.9	M	P61	3160	203														
MAY 26	18:55E	14.4	1150	H	82.3	M	P61	2910	209														
MAY 26	19:30E	14.4	1150	H	113	M	P61	2570	202														
MAY 26	19:35E	14.4	1150	H	122		P61	2610	220														
MAY 26	20:05E	14.4	1150	H	146	M	P61	2570	186														
MAY 26	20:41	14.4	1150	H	174	M	P61	2420	192														
MAY 27	07:15	13.3	1140	H	122		D49	2230	224	12	21	33	49	66	85	97	100				15	64	21
MAY 27	16:00	15.6	1140	H	122		D49	2130	202														
MAY 28	10:15	13.9	1030	H	122		D49	1740	191														
MAY 28	18:30	15.6	1030	H	122		D49	1570	196														
MAY 29	06:30	13.3	912	H	122		D49	1370	207														
MAY 29	18:30	15.6	912	H	WERB		DIP	816	204														

NOTE :

TIME SYMBOL: E - ESTIMATED
DISCHARGE SYMBOL(S): H - DAILY MEAN
VERTICAL SYMBOL(S): M - A SEDIMENT MEASUREMENT VERTICAL

(CONTINUED)

SOUTH SASKATCHEWAN RIVER AT HIGHWAY NO. 41

STATION NO. 05AK001

INSTANTANEOUS SUSPENDED SEDIMENT FOR 1967

(CONTINUED)

DATE	TIME	WATER TEMP. (C)	INSTANT. DISCHARGE (M3/S)		SINGLE SAMPLING VERTICAL (M)		TYPE OF SAMPLER	INSTANT. CONCENT. (MG/L)	DISSOLVED SOLIDS (MG/L)	PERCENT FINER THAN INDICATED SIZE, IN MILLIMETRES .002	.004	.008	.016	.031	.062	.125	.250	.500	1.00	2.00	PERCENT SAND	SILT	CLAY
MAY 30	08:00	14.4	861	H	WERB		DIP	1010	192														
MAY 30	19:00	15.0	861	H	WERB		DIP	1460	185														
MAY 31	06:30	13.3	855	H	WERB		DIP	737	194														
MAY 31	18:45	13.9	855	H	WERB		DIP	432	197														
JUN 01	06:30	12.8	917	H	122		D49	1110	194	11	17	26	36	48	63	79	90	95	98	100	37	46	17
JUN 01	19:00	14.4	917	H	122		D49	1040	194	13	17	26	38	50	69	86	95	99	100		31	52	17
JUN 02	06:00	12.8	1310	H	122		D49	1260	195	13	17	24	35	48	66	83	94	98	99	100	34	49	17
JUN 02	18:45	15.0	1310	H	WERB		DIP	1220	197														
JUN 03	08:15	12.2	2010	H	WERB		DIP	2660	232														
JUN 03	12:30	13.3	2010	H	WERB		DIP	3150	228														
JUN 03	17:15	12.8	2010	H	WERB		DIP	3620	236														
JUN 04	08:15	12.2	1900	H	WERB		DIP	3060	215														
JUN 04	16:25E	13.3	1900	H	42.7	M	P61	3510	206														
JUN 04	16:55E	13.3	1900	H	79.2	M	P61	3330	216														
JUN 04	17:30	13.3	1890		122		D49	2990	209	24	31	45	63	77	91	97	100				9	60	31
JUN 04	17:35E	13.3	1900	H	122		P61	2990	200														
JUN 04	18:10E	13.3	1900	H	152	M	P61	2920	204														
JUN 04	18:30	12.8	1900	H	183	M	P61	2770	203														
JUN 05	06:30	11.7	1600	H	122		D49	2380	200														
JUN 05	12:45	12.8	1600	H	122		D49	2120	200														
JUN 05	19:15	13.9	1600	H	122		D49	1910	196	20	30	45	62	77	89	96	98	100			11	59	30
JUN 06	08:15	11.1	1610	H	WERB		DIP	1470	200														
JUN 06	12:45	13.3	1610	H	WERB		DIP	1340	200														
JUN 06	19:15	13.3	1610	H	122		D49	1490	199	16	25	38	55	72	87	97	100				13	62	25
JUN 07	12:30		1580	H	122		D49	1470	197	18	28	41	56	71	84	95	99	100			16	56	28
JUN 07	16:45E		1580	H	WERB		DIP	1230	202														
JUN 07	12:30		1580	H	122		D49	1470	187														
JUN 07	19:15		1580	H	WERB		DIP	1060	215														
JUN 08	05:00		1400	H	122		D49	1360	202														
JUN 08	12:45	15.0	1400	H	122		D49	1270	199	21	29	43	58	72	85	95	99	100			15	56	29
JUN 08	19:00	15.0	1400	H	WERB		DIP	1420	201														
JUN 09	05:30	14.4	1270	H	122		D49	1030	204														
JUN 09	13:50	15.0	195		177	M	D49	879	196	18	28	42	57	73	88	98	100				12	60	28
JUN 09	14:00	15.0	277		146	M	D49	974	185	18	26	39	53	67	82	95	99	100			18	56	26
JUN 09	14:10E	15.0	1270	H	122		D49	938	198														
JUN 09	14:15	15.6	308		113	M	D49	977	182	19	26	36	50	66	81	94	100				19	55	26
JUN 09	14:20	15.6	280		85.3	M	D49	1180	178	13	20	30	42	54	67	82	94	98	99	100	33	47	20
JUN 09	14:30	15.6	210		48.8	M	D49	1230	194	16	20	29	42	53	64	77	88	93	96	100	36	44	20
JUN 09	19:30	16.1	1270	H	122		D49	947	193														

NOTE :

TIME SYMBOL: E - ESTIMATED
DISCHARGE SYMBOL(S): H - DAILY MEAN
VERTICAL SYMBOL(S): M - A SEDIMENT MEASUREMENT VERTICAL

(CONTINUED)

SOUTH SASKATCHEWAN RIVER AT HIGHWAY NO. 41

STATION NO. 05AK001

INSTANTANEOUS SUSPENDED SEDIMENT FOR 1967

(CONTINUED)

DATE	TIME	WATER TEMP. (C)	INSTANT. DISCHARGE (M3/S)		SINGLE SAMPLING VERTICAL (M)	TYPE OF SAMPLER	INSTANT. CONCENT. (MG/L)	DISSOLVED SOLIDS (MG/L)	PERCENT FINER THAN INDICATED SIZE, IN MILLIMETRES .002	.004	.008	.016	.031	.062	.125	.250	.500	1.00	2.00	PERCENT SAND	SILT	CLAY
JUN 10	07:30	14.4	1250	H	122	D49	910	185														
JUN 10	12:45	15.0	1250	H	122	D49	937	187	17	25	36	50	64	79	91	99	100			21	54	25
JUN 10	17:00	14.4	1250	H	122	D49	903	183														
JUN 11	08:15	13.3	1230	H	122	D49	878	194														
JUN 11	12:30	14.4	1230	H	122	D49	899	192	22	26	36	48	61	76	91	99	100			24	50	26
JUN 11	15:30	14.4	1230	H	122	D49	901	187														
JUN 12	06:15	13.3	1290	H	122	D49	814	185														
JUN 12	12:45	13.9	1290	H	122	D49	953	192	16	24	36	50	64	78	92	98	100			22	54	24
JUN 12	19:00	13.3	1290	H	122	D49	843	198														
JUN 13	07:00	12.2	1380	H	122	D49	948	195														
JUN 13	12:15	12.2	1380	H	122	D49	947	188	15	20	30	43	58	75	92	97	99	100		25	55	20
JUN 13	17:45	13.3	1380	H	122	D49	945	198														
JUN 14	06:15	12.2	1350	H	122	D49	911	196	14	22	34	47	62	77	91	99	100			23	55	22
JUN 14	12:45	13.3	1350	H	122	D49	873	193														
JUN 14	17:15	13.3	1350	H	122	D49	872	188														
JUN 15	05:45	12.8	1260	H	122	D49	782	202	22	28	38	51	64	77	91	98	100			23	49	28
JUN 15	12:30	14.4	1260	H	WERB	DIP	528	204														
JUN 15	16:45	15.0	1260	H	WERB	DIP	456	201														
JUN 16	05:30	14.4	1080	H	122	D49	635	192	18	25	37	51	64	78	92	99	100			22	53	25
JUN 16	12:30	15.0	1080	H	WERB	DIP	469	195														
JUN 16	19:30	15.0	1080	H	WERB	DIP	570	197														
JUN 17	08:15	15.6	1030	H	122	D49	701	194														
JUN 17	17:30	16.1	1030	H	122	D49	660	189														
JUN 18	08:30	15.6	983	H	122	D49	590	195														
JUN 18	17:00	16.7	983	H	122	D49	618	191	17	22	32	45	56	73	90	98	100			27	51	22
JUN 19	08:00	15.6	983	H	122	D49	558	178														
JUN 19	13:00	16.1	983	H	122	D49	599	178														
JUN 20	07:30	15.6	1130	H	122	D49	675	204														
JUN 20	18:30	17.2	1130	H	122	D49	753	186														
JUN 21	06:30	16.1	1260	H	122	D49	826	173														
JUN 21	16:00	16.1	1260	H	122	D49	817	184	14	21	30	42	56	73	89	98	100			27	52	21
JUN 22	06:00	15.6	1270	H	122	D49	844	179														
JUN 22	18:00	16.1	1270	H	122	D49	788	183	18	22	34	47	60	77	92	99	100			23	55	22
JUN 23	10:00	15.6	1190	H	122	D49	717	175														
JUN 23	18:30	16.1	1190	H	122	D49	702	181	19	24	36	49	62	75	91	98	100			25	51	24
JUN 24	05:00	15.6	1140	H	122	D49	610	178														
JUN 24	15:30	16.7	1140	H	122	D49	596	182	10	17	28	43	58	72	89	98	100			28	55	17
JUN 25	09:30	16.7	1120	H	122	D49	505	165														
JUN 25	18:45	17.2	1120	H	122	D49	507	159														
JUN 26	07:15	17.8	1070	H	122	D49	501	168	13	18	29	43	55	70	87	97	100			30	52	18
JUN 26	18:30	17.8	1070	H	122	D49	498	160														

NOTE :

DISCHARGE SYMBOL(S): H - DAILY MEAN

(CONTINUED)

SOUTH SASKATCHEWAN RIVER AT HIGHWAY NO. 41

STATION NO. 05AK001

(CONTINUED)

INSTANTANEOUS SUSPENDED SEDIMENT FOR 1967

DATE	TIME	WATER TEMP. (C)	INSTANT. DISCHARGE (M3/S)		SINGLE SAMPLING VERTICAL (M)		TYPE OF SAMPLER	INSTANT. CONCENT. (MG/L)	DISSOLVED SOLIDS (MG/L)	PERCENT FINER THAN INDICATED SIZE, IN MILLIMETRES .002	.004	.008	.016	.031	.062	.125	.250	.500	1.00	2.00	PERCENT SAND	SILT	CLAY
JUN 27	06:30	16.7	1010	H	122		D49	476	162														
JUN 27	18:30	18.9	1010	H	122		D49	488	171	14	19	29	42	54	68	85	97	100			32	49	19
JUN 28	07:30	17.8	934	H	122		D49	552	161														
JUN 29	08:00	18.9	827	H	122		D49	457	161														
JUN 30	07:30	18.9	793	H	122		D49	512	179	9	14	22	33	44	55	72	87	94	97	100	45	41	14
JUN 30	17:00	19.4	793	H	122		D49	487	185														
JUL 01	06:30	18.9	793	H	122		D49	499	177														
JUL 01	12:15	18.9	793	H	WERB		DIP	320	171														
JUL 02	09:00	13.3	799	H	122		D49	446	171														
JUL 02	18:30	14.4	799	H	122		D49	397	168	14	18	28	39	50	64	80	93	97	99	100	36	46	18
JUL 03	06:15	14.4	782	H	122		D49	431	159														
JUL 04	07:30		748	H	122		D49	334	167														
JUL 04	20:00		748	H	122		D49	388	166	11	16	24	33	44	56	71	87	94	97	100	44	40	16
JUL 05	19:30		725	H	122		D49	348	162														
JUL 06	19:00		694	H	122		D49	246	172														
JUL 07	17:30		657	H	122		D49	293	160														
JUL 08	07:30		606	H	122		D49	328	159														
JUL 09	19:30		600	H	122		D49	333	168														
JUL 10	07:00		651	H	122		D49	309	166														
JUL 11	08:00		600	H	122		D49	341	175														
JUL 12	06:45		549	H	WERB		DIP	068	181														
JUL 13	07:30		510	H	122		D49	237	177														
JUL 14	07:45		473	H	122		D49	210	182														
JUL 15	05:30		439	H	122		D49	175	178														
JUL 16	19:00		374	H	122		D49	121	180														
JUL 17	05:45		371	H	122		D49	116	182														
JUL 18	05:30		371	H	122		D49	134	185														
JUL 19	06:00	22.2	348	H	122		D49	121	182														
JUL 19	12:25	22.2	348	H	162	M	D49	078	193														
JUL 19	12:30E	22.2	348	H	134	M	D49	078	174														
JUL 19	12:35E	22.2	348	H	122		D49	123	166														
JUL 19	12:40E	22.2	348	H	113	M	D49	148	180														
JUL 19	12:50E	22.2	348	H	88.4	M	D49	109	176														
JUL 19	13:00	22.2	348	H	67.1	M	D49	104	177														
JUL 20	05:45	21.7	374	H	122		D49	118	178														
JUL 21	06:00	21.1	368	H	122		D49	140	172														
JUL 22	08:30	20.6	323	H	122		D49	479	173														
JUL 23	18:30	21.7	286	H	122		D49	073	179														
JUL 24	07:15	20.6	272	H	122		D49	058	172														
JUL 25	06:15	20.0	270	H	122		D49	071	177														
JUL 26	08:15	20.0	254	H	122		D49	065	183														

NOTE :

TIME SYMBOL: E - ESTIMATED
DISCHARGE SYMBOL(S): H - DAILY MEAN
VERTICAL SYMBOL(S): M - A SEDIMENT MEASUREMENT VERTICAL

(CONTINUED)

SOUTH SASKATCHEWAN RIVER AT HIGHWAY NO. 41

STATION NO. 05AK001

INSTANTANEOUS SUSPENDED SEDIMENT FOR 1967

(CONTINUED)

DATE	TIME	WATER TEMP. (C)	INSTANT. DISCHARGE (M3/S)		SINGLE SAMPLING VERTICAL (M)		TYPE OF SAMPLER	INSTANT. CONCENT. (MG/L)	DISSOLVED SOLIDS (MG/L)	PERCENT FINER THAN INDICATED SIZE, IN MILLIMETRES .002	.004	.008	.016	.031	.062	.125	.250	.500	1.00	2.00	PERCENT SAND	SILT	CLAY
JUL 27	08:30	20.0	224	H	122		D49	040	174														
JUL 28	06:00	21.7	224	H	122		D49	036	172														
JUL 31	06:00	22.8	180	H	122		D49	019	185														
AUG 02	06:00	21.1	165	H	122		D49	028	178														
AUG 04	05:45	20.6	146	H	122		D49	018	190														
AUG 06	18:15	22.2	154	H	WERB		DIP	030	208														
AUG 08	06:30	18.9	161	H	122		D49	053	212														
AUG 10	05:45	21.1	144	H	122		D49	044	211														
AUG 12	05:30	23.3	154	H	122		D49	030	217														
AUG 13	11:00	23.3	149	H	122		D49	024	222														
AUG 15	06:00	22.8	135	H	122		D49	019	226														
AUG 17	05:30	20.6	133	H	WERB		DIP	018	224														
AUG 19	06:15	23.3	108	H	122		D49	012	201														
AUG 20	18:00	23.9	88.9	H	122		D49	009	202														
AUG 22	06:00	21.1	101	H	122		D49	010	206														
AUG 23	15:00	22.2	107	H	122		D49	012	216														
AUG 23	14:15	22.2	107	H	MULT		D49	007	215														
AUG 24	06:00	20.6	107	H	122		D49	012	207														
AUG 26	06:15	18.3	95.1	H	122		D49	012	206														
AUG 29	07:00	18.9	77.0	H	122		D49	006	220														
AUG 31	06:00	18.3	91.5	H	122		D49	009	225														
SEP 02	06:30	19.4	81.3	H	WERB		DIP	006	237														
SEP 03	18:30	20.0	77.9	H	122		D49	008	233														
SEP 05	18:15	23.3	64.3	H	WERB		DIP	017	234														
SEP 06	07:30	17.8	59.7	H	122		D49	005	237														
SEP 09	07:30	17.2	56.1	H	122		D49	008	251														
SEP 12	07:45	14.4	85.0	Y	WERB		DIP	011	224														
SEP 17	16:30	16.7	110	Y	122		D49	009	224														
SEP 19	09:00	16.1	129	H	122		D49	011	226														
SEP 19	12:15	16.7	129	H	158	M	D49	008	216														
SEP 19	12:25E	16.7	129	H	134	M	D49	010	222														
SEP 19	12:40E	16.7	129	H	122		D49	009	226														
SEP 19	13:00E	16.7	129	H	116	M	D49	010	222														
SEP 19	13:10E	16.7	129	H	70.1	M	D49	010	227														
SEP 19	13:15E	16.7	129	H	94.5	M	D49	008	227														
SEP 21	08:00	15.0	105	H	122		D49	008	217														
SEP 23	07:30	13.3	65.1	H	122		D49	007	217														
SEP 24	18:00	15.6	65.1	H	122		D49	009	222														
SEP 26	08:00	12.2	79.9	H	122		D49	012	231														
SEP 28	09:00	13.9	79.0	H	122		D49	007	241														
SEP 30	08:00	15.6	62.3	H	122		D49	005	233														

NOTE :

TIME SYMBOL: E - ESTIMATED
DISCHARGE SYMBOL(S): H - DAILY MEAN Y - DAILY MEAN; ESTIMATED
VERTICAL SYMBOL(S): M - A SEDIMENT MEASUREMENT VERTICAL

(CONTINUED)

SOUTH SASKATCHEWAN RIVER AT HIGHWAY NO. 41 STATION NO. 05AK001

INSTANTANEOUS SUSPENDED SEDIMENT FOR 1967 (CONTINUED)

DATE	TIME	WATER TEMP. (C)	INSTANT. DISCHARGE (M3/S)		SINGLE SAMPLING VERTICAL (M)		TYPE OF SAMPLER	INSTANT. CONCENT. (MG/L)	DISSOLVED SOLIDS (MG/L)	PERCENT FINER THAN INDICATED SIZE, IN MILLIMETRES .002	.004	.008	.016	.031	.062	.125	.250	.500	1.00	2.00	PERCENT SAND	SILT	CLAY
OCT 01	18:30	16.1	56.6	H	122		D49	012	234														
OCT 03	09:30	11.7	81.3	H	WERB		DIP	016	230														
OCT 05	08:00	11.1	83.8	H	122		D49	008	251														
OCT 07	08:45	10.0	84.1	H	WERB		DIP	014	246														
OCT 08	17:45	9.4	76.5	H	122		D49	007	233														
OCT 10	08:30	10.6	72.2	H	122		D49	007	240														
OCT 12	08:00	10.0	84.7	H	122		D49	006	232														
OCT 14	08:15	8.9	77.9	H	122		D49	006	240														
OCT 15	11:15	9.4	74.2	H	WERB		DIP	007	240														
OCT 18	09:00	6.7	60.6	H	122		D49	007	239														
OCT 21	09:30	6.1	72.8	H	122		D49	006	273														
OCT 22	14:30	7.8	67.4	H	122		D49	007	276														
OCT 24	09:30	5.0	59.2	H	122		DIP	006	253														
OCT 28	10:00	4.4	53.5	H	122		D49	007	284														
OCT 29	15:30	5.0	53.2	H	122		D49	006	290														
OCT 31	15:00	4.4	59.7	H	WERB		DIP	005	287														
NOV 02	12:15	2.8	71.1	H	155	M	D49	009	302														
NOV 02	12:30E	2.8	71.1	H	134	M	D49	006	307														
NOV 02	12:45E	3.3	71.1	H	122		D49	005	304														
NOV 02	13:00E	3.3	71.1	H	113	M	D49	006	312														
NOV 02	13:15E	3.3	71.1	H	94.5	M	D49	006	311														
NOV 02	13:30	3.3	71.1	H	73.2	M	D49	006	308														
NOV 04	15:30	0.6	65.4	H	WERB		DIP	014	317														
NOV 07	09:30	0.0	76.5	H	WERB		DIP	013	283														
NOV 11	09:15	2.2	112	H	WERB		DIP	025	242														
NOV 18	08:45	0.6	90.9	H	WERB		DIP	031	265														
NOV 25	08:30	0.0	103	W	WERB		DIP	010	284														
DEC 02	08:45	0.0	44.5	W	WERB		DIP	027	277														
DEC 09	09:30	0.0	66.5	W	WERB		DIP	008	307														
DEC 16	09:45	0.0	75.9	W	122		DH59	009	320														
DEC 20	13:30	0.0	35.7	W	MULT		DH48	009	306														
DEC 23	10:45	0.0	81.3	W	122		DH59	014	316														
DEC 29	12:45	0.0	78.4	W	122		DH59	016	313														

NOTE :

TIME SYMBOL: E - ESTIMATED
DISCHARGE SYMBOL(S): H - DAILY MEAN W - DAILY MEAN; ICE CONDITIONS
VERTICAL SYMBOL(S): M - A SEDIMENT MEASUREMENT VERTICAL

SOUTH SASKATCHEWAN RIVER AT HIGHWAY NO. 41

STATION NO. 05AK001

INSTANTANEOUS SUSPENDED SEDIMENT FOR 1968

DATE	TIME	WATER TEMP. (C)	INSTANT. DISCHARGE (M3/S)		SINGLE SAMPLING VERTICAL (M)		TYPE OF SAMPLER	INSTANT. CONCENT. (MG/L)	DISSOLVED SOLIDS (MG/L)	PERCENT FINER THAN INDICATED SIZE, IN MILLIMETRES .002	.004	.008	.016	.031	.062	.125	.250	.500	1.00	2.00	PERCENT SAND	SILT	CLAY
JAN 09	10:30	0.0	60.6	W	122		DH48	048	316														
JAN 13	11:00	0.0	94.6	W	122		DH48	013	305														
JAN 19	10:00	0.0	104	W	122		DH48	027	285														
JAN 30	13:00	0.0	88.6	W	122		DH48	017	260														
FEB 05	10:45	0.0	54.1	W	122		DH48	015	278														
FEB 09	12:25	0.0	94.0	W	MULT		DH48	018	273														
FEB 09	12:50	0.0	94.0	W	125		DH48	013	274														
FEB 10	10:30	0.0	100	W	122		DH48	016	285														
FEB 16	10:15	0.0	92.0	W	122		DH48	015	256														
FEB 24	10:00	0.0	81.3	W	122		DH48	011	268														
MAR 02	09:30	0.0	137	W	122		DH48	020	246														
MAR 09	09:15	0.0	171	W	WERB		DIP	017	206														
MAR 16	08:45	0.0	182	W	WERB		DIP	047	222														
MAR 19	14:45	0.0	155	W	35.1	X	DH48	007	225														
MAR 23	11:00	0.0	128	W	WERB		DH48	019	225														
MAR 30	09:45	3.9	98.3	V	WERB		DH48	019	256														
APR 02	10:00	2.2	108	H	WERB		DH48	015	254														
APR 04	08:15	1.7	122	H	WERB		DH48	032	247														
APR 06	08:00	4.4	103	H	WERB		DH48	013	247														
APR 09	06:30	3.9	100	H	WERB		DH48	009	239														
APR 10	11:45	8.9	91.5	H	157	M	D49	016	221														
APR 10	12:00E	8.9	91.5	H	134	M	D49	015	227														
APR 10	12:05E	8.9	91.5	H	116	M	D49	018	232														
APR 10	12:10E	8.9	91.5	H	96.0	M	D49	028	226														
APR 10	12:20E	8.9	91.5	H	73.2	M	D49	016	227														
APR 10	12:30	8.9	91.5	H	122		D49	016	233														
APR 11	06:00	3.3	89.5	H	WERB		DH48	018	228														
APR 13	06:45	1.1	95.7	H	WERB		DH48	011	230														
APR 15	06:15	3.9	97.7	H	WERB		DH48	016	234														
APR 17	07:30	1.1	102	H	WERB		DH48	013	240														
APR 19	06:15	6.1	106	H	WERB		DH48	017	248														
APR 21	15:45	3.3	106	H	WERB		DH48	159	254														
APR 23	06:00	5.0	81.3	H	WERB		DH48	030	268														
APR 25	07:00	6.7	90.9	H	WERB		DH48	010	260														
APR 27	07:15	5.6	78.4	H	122		D49	011	260														
APR 29	07:45	11.7	51.0	H	122		D49	007	263														
MAY 02	08:00	12.8	67.7	H	122		D49	013	277														
MAY 04	06:45	12.2	56.9	H	122		D49	009	278														
MAY 06	08:45	11.7	53.5	H	122		D49	008	291														
MAY 06	16:45	12.2	53.5	H	122		D49	005	292														
MAY 08	07:15	8.9	74.5	H	122		D49	044	294														

NOTE :

TIME SYMBOL: E - ESTIMATED
DISCHARGE SYMBOL(S): H - DAILY MEAN V - DAILY MEAN; MANUAL GAUGE W - DAILY MEAN; ICE CONDITIONS
VERTICAL SYMBOL(S): M - A SEDIMENT MEASUREMENT VERTICAL X - NOT AT REGULAR SINGLE SAMPLE VERTICAL

(CONTINUED)

SOUTH SASKATCHEWAN RIVER AT HIGHWAY NO. 41

STATION NO. 05AK001

INSTANTANEOUS SUSPENDED SEDIMENT FOR 1968

(CONTINUED)

DATE	TIME	WATER TEMP. (C)	INSTANT. DISCHARGE (M3/S)		SINGLE SAMPLING VERTICAL (M)	TYPE OF SAMPLER	INSTANT. CONCENT. (MG/L)	DISSOLVED SOLIDS (MG/L)	PERCENT FINER THAN INDICATED SIZE, IN MILLIMETRES .002	.004	.008	.016	.031	.062	.125	.250	.500	1.00	2.00	PERCENT SAND	SILT	CLAY
MAY	10 07:30	8.9	77.6	H	122	D49	018	305														
MAY	12 13:30	13.3	101	H	122	D49	079	290														
MAY	13 08:00	13.3	99.4	H	122	D49	063	263														
MAY	15 07:30	11.1	82.4	H	122	D49	025	269														
MAY	17 06:00	13.9	84.1	H	122	D49	025	258														
MAY	19 16:45	17.8	119	H	WERB	DH48	058	264														
MAY	21 05:45	11.7	134	H	WERB	DH48	025	270														
MAY	23 06:45	15.6	150	H	122	D49	058	226														
MAY	25 06:00	15.0	188	H	122	D49	094	220														
MAY	26 18:45	17.0	300	H	WERB	---	466	215	7	11	20	34	53	69	79	89	94	97	100	31	58	11
MAY	27 19:15	15.6	436	H	122	D49	1000	218														
MAY	28 06:30	13.9	464	H	122	D49	1450	205														
MAY	28 19:00	16.1	464	H	122	D49	1280	196														
MAY	29 06:45	15.0	459	H	WERB	---	894	192	15	23	38	57	74	85	91	96	99	99	100	15	62	23
MAY	29 13:15	16.7	459	H	122	D49	737	197														
MAY	29 14:00	16.7	459	H	MULT	D49	683	195														
MAY	29 18:00	17.8	459	H	122	D49	756	180														
MAY	30 12:30	16.7	439	H	WERB	DH48	681	195														
MAY	30 19:30	16.1	439	H	122	D49	585	199														
MAY	31 06:00	15.0	411	H	122	D49	615	194														
MAY	31 19:00	15.5	411	H	122	D49	444	188	16	21	36	56	72	81	88	94	97	99	100	19	60	21
JUN	01 06:00	15.0	433	H	122	D49	456	189														
JUN	01 16:30	16.1	433	H	122	D49	470	188														
JUN	02 09:00	16.1	464	H	122	D49	597	186														
JUN	02 19:00	16.5	464	H	122	D49	401	181	22	33	52	79	96	99	99	100				1	66	33
JUN	03 05:30	16.1	470	H	122	D49	552	181														
JUN	03 18:00	17.2	470	H	122	D49	560	180														
JUN	04 05:30	16.5	447	H	122	D49	504	183	15	20	35	52	66	76	84	91	95	97	100	24	56	20
JUN	04 18:30	17.8	447	H	122	D49	493	184														
JUN	05 06:15	16.7	433	H	122	D49	430	185														
JUN	06 05:45	16.1	464	H	122	D49	363	172														
JUN	07 09:00	16.7	547	H	WERB	DH48	238	180														
JUN	07 18:30	16.0	547	H	122	D49	341	181	21	33	52	75	93	98	99	100				2	65	33
JUN	08 06:15	15.6	643	H	122	D49	801	169														
JUN	08 15:00	16.1	643	H	WERB	DH48	550	174														
JUN	09 09:30	15.6	614	H	122	D49	2890	203														
JUN	09 18:00	16.0	614	H	122	D49	1110	197	15	20	29	41	54	68	77	88	94	97	100	32	48	20
JUN	10 05:45	16.1	629	H	122	D49	734	177														
JUN	10 18:45	16.7	629	H	122	D49	609	180														
JUN	11 05:00	17.0	699	H	122	D49	682	177	10	14	25	38	53	70	83	90	95	97	100	30	56	14
JUN	11 18:30	18.3	699	H	WERB	DH48	407	180														

NOTE :

DISCHARGE SYMBOL(S): H - DAILY MEAN

(CONTINUED)

SOUTH SASKATCHEWAN RIVER AT HIGHWAY NO. 41

STATION NO. 05AK001

INSTANTANEOUS SUSPENDED SEDIMENT FOR 1968

(CONTINUED)

DATE	TIME	WATER TEMP. (C)	INSTANT. DISCHARGE (M3/S)		SINGLE SAMPLING VERTICAL (M)		TYPE OF SAMPLER	INSTANT. CONCENT. (MG/L)	DISSOLVED SOLIDS (MG/L)	PERCENT FINER THAN INDICATED SIZE, IN MILLIMETRES .002	.004	.008	.016	.031	.062	.125	.250	.500	1.00	2.00	PERCENT SAND	SILT	CLAY
JUN 12	05:30	18.0	773	H	122		D49	1150	186	15	20	30	45	62	81	90	96	99	100		19	61	20
JUN 12	18:15	17.8	773	H	WERB		DH48	540	189														
JUN 13	05:45	17.2	765	H	122		D49	998	197														
JUN 13	15:25E	17.2	765	H	122		P61	890	177														
JUN 13	15:30	17.0	125		54.9	M	D49	890	177														
JUN 13	16:00	17.0	166		54.9	M	D49	1210	179	11	20	31	46	63	80	92	97	100				
JUN 13	16:05E	17.2	765	H	85.3	M	P61	1210	179	09	13	22	34	45	63	78	88	93	96	100	20	60	20
JUN 13	16:35	17.0	183		116	M	D49	905	194	10	17	27	40	57	74	88	94	99	100		37	50	13
JUN 13	17:10E	17.2	765	H	140	M	P61	832	182												26	57	17
JUN 13	17:15	17.0	158		140	M	D49	832	182	14	19	32	47	64	83	95	99	100				
JUN 13	18:00	17.0	132		171	M	D49	777	172	15	20	33	51	69	87	95	99	100			17	64	19
JUN 13	19:00	17.2	765	H	122		D49	888	188												13	67	20
JUN 14	06:15	16.1	731	H	122		D49	732	191														
JUN 15	07:30	15.0	722	H	122		D49	640	185														
JUN 15	16:45	16.1	722	H	122		D49	580	191														
JUN 16	09:30	16.5	705	H	122		D49	523	193	14	19	32	47	58	72	85	94	98	99	100	28	53	19
JUN 16	18:00	17.2	705	H	122		D49	487	178														
JUN 17	05:30	16.1	685	H	122		D49	1740	172														
JUN 17	17:30	17.0	685	H	122		D49	410	174														
JUN 18	05:45	16.7	634	H	122		D49	428	174														
JUN 18	17:45	18.3	634	H	122		D49	462	172														
JUN 19	05:00	18.5	530	H	122		D49	372	175	14	19	28	40	50	60	77	94	97	99	100	40	41	19
JUN 19	17:30	19.4	530	H	122		D49	306	170														
JUN 20	06:00	18.9	481	H	122		D49	288	160														
JUN 21	07:30	18.3	442	H	122		D49	289	166														
JUN 21	17:45	20.0	442	H	122		D49	248	168														
JUN 22	05:45	18.9	394	H	122		D49	241	185														
JUN 22	16:30	19.4	394	H	122		D49	224	175														
JUN 23	19:30	18.9	343	H	122		D49	197	163														
JUN 24	19:00	18.9	382	H	WERB		DH48	055	172														
JUN 26	07:00	17.2	405	H	122		D49	213	172														
JUN 27	05:30	18.3	348	H	122		D49	183	177														
JUN 28	11:00	16.7	323	H	122		D49	297	176														
JUN 30	16:00	16.1	245	H	WERB		DH48	092	189														
JUL 01	06:45	15.0	256	H	122		D49	093	185														
JUL 02	07:00	16.1	303	H	122		D49	084	189														
JUL 03	18:30	18.9	408	H	122		D49	254	195														

NOTE :

TIME SYMBOL: E - ESTIMATED
DISCHARGE SYMBOL(S): H - DAILY MEAN
VERTICAL SYMBOL(S): M - A SEDIMENT MEASUREMENT VERTICAL

(CONTINUED)

SOUTH SASKATCHEWAN RIVER AT HIGHWAY NO. 41

STATION NO. 05AK001

INSTANTANEOUS SUSPENDED SEDIMENT FOR 1968

(CONTINUED)

DATE	TIME	WATER TEMP. (C)	INSTANT. DISCHARGE (M3/S)		SINGLE SAMPLING VERTICAL (M)		TYPE OF SAMPLER	INSTANT. CONCENT. (MG/L)	DISSOLVED SOLIDS (MG/L)	PERCENT FINER THAN INDICATED SIZE, IN MILLIMETRES .002	.004	.008	.016	.031	.062	.125	.250	.500	1.00	2.00	PERCENT SAND	SILT	CLAY
JUL 04	10:30	20.0	368	H	WERB		DH48	101	200														
JUL 04	17:00	20.0	368	H	158	M	D49	128	203														
JUL 04	17:20E	20.0	368	H	134	M	D49	152	201														
JUL 04	17:40E	20.0	368	H	110	M	D49	243	195														
JUL 04	17:50E	20.0	368	H	91.4	M	D49	171	196														
JUL 04	18:15	20.0	368	H	61.0	M	D49	137	195														
JUL 04	17:30	20.0	368	H	122		D49	194	194														
JUL 05	06:30	20.0	309	H	122		D49	207	198	19	38	48	59	66	72	80	89	95	98	100	28	34	38
JUL 06	06:45	21.7	259	H	122		D49	089	193														
JUL 08	06:45	21.1	214	H	122		D49	066	189														
JUL 09	06:30	21.7	217	H	122		D49	060	193														
JUL 10	05:30	22.8	216	H	122		D49	048	192														
JUL 11	05:15	23.3	267	H	122		D49	074	189														
JUL 13	06:45	21.1	256	H	122		D49	066	191														
JUL 14	18:00	21.7	237	H	122		D49	047	185														
JUL 16	07:45	20.0	213	H	122		D49	038	181														
JUL 18	08:00	18.3	219	H	122		D49	039	183														
JUL 20	06:30	18.9	182	H	WERB		DH48	031	179														
JUL 21	18:45	17.8	167	H	122		D49	038	181														
JUL 23	11:30	18.3	159	H	122		D49	108	189														
JUL 24	15:30	20.0	163	H	67.1	M	D49	074	208														
JUL 24	15:40E	20.0	163	H	94.5	M	D49	066	201														
JUL 24	15:50E	20.0	163	H	116	M	D49	061	204														
JUL 24	16:00E	20.0	163	H	134	M	D49	051	198														
JUL 24	16:10E	20.0	163	H	158	M	D49	052	196														
JUL 24	16:20	20.0	163	H	122		D49	057	209														
JUL 25	05:30	17.2	141	H	122		D49	024	182														
JUL 26	05:45	20.6	129	H	122		D49	013	189														
JUL 30	07:00	17.2	175	H	WERB		DH48	057	182														
AUG 01	06:00	18.9	145	H	122		D49	015	182														
AUG 05	05:45	21.7	122	H	122		D49	012	193														
AUG 07	19:45	18.9	122	H	122		D49	012	196														
AUG 09	05:30	17.2	104	H	122		D49	010	188														
AUG 11	17:30	20.6	75.6	H	122		D49	002	197														
AUG 13	07:00	16.7	134	H	122		D49	026	208														
AUG 15	07:15	15.6	123	H	122		D49	011	202														
AUG 17	06:30	15.0	105	H	122		D49	005	194														
AUG 18	19:15	17.8	112	H	WERB		DH48	008	194														
AUG 20	09:00	16.1	123	H	122		D49	010	209														
AUG 22	06:30	16.7	152	H	122		D49	042	200														
AUG 24	05:45	16.1	144	H	WERB		DH48	026	201														

NOTE :

TIME SYMBOL: E - ESTIMATED
DISCHARGE SYMBOL(S): H - DAILY MEAN
VERTICAL SYMBOL(S): M - A SEDIMENT MEASUREMENT VERTICAL

(CONTINUED)

SOUTH SASKATCHEWAN RIVER AT HIGHWAY NO. 41

STATION NO. 05AK001

INSTANTANEOUS SUSPENDED SEDIMENT FOR 1968

(CONTINUED)

DATE	TIME	WATER TEMP. (C)	INSTANT. DISCHARGE (M3/S)		SINGLE SAMPLING VERTICAL (M)	TYPE OF SAMPLER	INSTANT. CONCENT. (MG/L)	DISSOLVED SOLIDS (MG/L)	PERCENT FINER THAN INDICATED SIZE, IN MILLIMETRES .002	.004	.008	.016	.031	.062	.125	.250	.500	1.00	2.00	PERCENT SAND	SILT	CLAY
AUG 25	14:00	18.9	144	H	122	D49	035	200														
AUG 28	06:00	17.8	155	H	122	D49	022	182														
AUG 29	14:30	18.9	135	H	70.1 M	D49	009	201														
AUG 29	14:35E	18.9	135	H	97.5 M	D49	011	206														
AUG 29	14:40E	18.9	*135	H	119 M	D49	013	202														
AUG 29	14:50	18.9	135	H	122	D49	020	205														
AUG 29	15:00	18.9	135	H	137 M	D49	018	205														
AUG 29	15:15	18.9	135	H	158 M	D49	014	207														
AUG 30	07:00	16.7	133	H	WERB	DH48	035	214														
SEP 01	13:00	17.8	112	H	122	D49	019	196														
SEP 05	17:00	14.4	150	H	122	D49	037	190														
SEP 08	18:00	16.1	120	H	122	D49	045	201														
SEP 10	07:00	15.6	108	H	WERB	DH48	027	208														
SEP 14	06:30	17.2	142	H	122	D49	033	208														
SEP 17	07:15	14.4	196	H	122	D49	051	192														
SEP 17	14:45	15.0	196	H	152 M	D49	040	200														
SEP 17	14:55	15.0	196	H	131 M	D49	037	195														
SEP 17	15:00	15.0	196	H	122	D49	043	202														
SEP 17	15:05	15.0	196	H	113 M	D49	045	198														
SEP 17	15:10	15.0	196	H	91.4 M	D49	036	211														
SEP 17	15:15	15.0	196	H	67.1 M	D49	033	206														
SEP 22	11:45	10.0	135	H	WERB	DH48	664	201														
SEP 24	07:30	8.3	183	H	122	D49	375	201														
SEP 26	07:00	9.4	232	H	122	D49	168	209														
SEP 28	09:00	11.0	281	H	122	D49	540	236	55	66	80	88	91	92	94	98	99	100		8	26	66
SEP 30	08:30	12.2	328	H	122	D49	459	227														
OCT 01	13:30	11.7	360	H	122	D49	521	220														
OCT 03	08:45	8.9	323	H	122	D49	355	198														
OCT 05	15:15	9.4	300	H	122	D49	427	190														
OCT 07	08:15	8.3	292	H	122	D49	178	193														
OCT 09	14:15	7.2	229	H	122	D49	064	204														
OCT 11	08:00	6.7	181	H	122	D49	079	209														
OCT 12	08:45	6.1	158	H	122	D49	053	216														
OCT 14	12:45	6.7	146	H	122	D49	044	234														
OCT 16	08:00	5.6	132	H	122	D49	030	243														
OCT 18	09:00	5.6	127	H	122	D49	033	242														
OCT 19	14:00	5.6	144	H	122	D49	033	255														
OCT 21	13:30	5.0	142	H	122	D49	029	245														

NOTE :

TIME SYMBOL: E - ESTIMATED
DISCHARGE SYMBOL(S): H - DAILY MEAN
VERTICAL SYMBOL(S): M - A SEDIMENT MEASUREMENT VERTICAL

(CONTINUED)

SOUTH SASKATCHEWAN RIVER AT HIGHWAY NO. 41

STATION NO. 05AK001

INSTANTANEOUS SUSPENDED SEDIMENT FOR 1968

(CONTINUED)

DATE	TIME	WATER TEMP. (C)	INSTANT. DISCHARGE (M3/S)		SINGLE SAMPLING VERTICAL (M)		TYPE OF SAMPLER	INSTANT. CONCENT. (MG/L)	DISSOLVED SOLIDS (MG/L)	PERCENT FINER THAN INDICATED SIZE, IN MILLIMETRES .002	.004	.008	.016	.031	.062	.125	.250	.500	1.00	2.00	PERCENT SAND	SILT	CLAY
OCT 22	14:15	6.7	149	H	76.2	M	D49	032	247														
OCT 22	14:20E	6.7	149	H	104	M	D49	036	243														
OCT 22	14:25E	6.7	149	H	122		D49	038	242														
OCT 22	14:30E	6.7	149	H	125	M	D49	035	242														
OCT 22	14:40E	6.7	149	H	140	M	D49	034	244														
OCT 22	15:00	6.7	149	H	165	M	D49	037	242														
OCT 23	08:30	5.0	150	H	122		D49	036	243														
OCT 25	11:30	6.7	228	H	122		D49	082	239														
OCT 26	08:30	6.7	192	H	WERB		DH48	059	238														
OCT 29	17:00	6.7	192	H	122		D49	079	238														
OCT 31	08:15	6.7	165	H	122		D49	056	239														
NOV 01	08:00	6.7	158	H	122		D49	057	240														
NOV 02	09:30	6.7	156	H	122		D49	036	233														
NOV 04	09:30	6.7	182	H	122		D49	039	237														
NOV 07	09:45	6.7	165	H	122		D49	027	242														
NOV 09	10:00	6.7	192	H	122		D49	030	233														
NOV 11	09:45	6.7	214	H	122		D49	063	225														
NOV 13	08:45	6.7	217	H	122		D49	073	213														
NOV 13	13:25	3.3	217	H	67.1		D49	058	215														
NOV 13	13:40	3.3	217	H	97.5		D49	068	209														
NOV 13	13:55	3.3	217	H	122		D49	1350	212														
NOV 13	14:00	3.3	217	H	122		D49	236	209														
NOV 13	14:10	3.3	217	H	122		D49	069	209														
NOV 13	14:25	3.3	217	H	140		D49	050	214														
NOV 13	14:40	3.3	217	H	165		D49	049	211														
NOV 15	09:45	1.1	176	H	WERB		DH48	038	139														
NOV 16	09:00	1.1	163	H	WERB		DH48	038	209														
NOV 22	13:45	1.7	108	H	WERB		DH48	035	237														
DEC 17	13:00	0.6	57.8	W	122		DH48	004	312														
DEC 20	13:00	0.6	69.1	W	122		DH48	010	310														
DEC 23	13:00	0.6	101	W	122		DH48	007	323														

NOTE :

TIME SYMBOL: E - ESTIMATED
DISCHARGE SYMBOL(S): H - DAILY MEAN W - DAILY MEAN; ICE CONDITIONS
VERTICAL SYMBOL(S): M - A SEDIMENT MEASUREMENT VERTICAL

SOUTH SASKATCHEWAN RIVER AT HIGHWAY NO. 41

STATION NO. 05AK001

INSTANTANEOUS SUSPENDED SEDIMENT FOR 1969

DATE	TIME	WATER TEMP. (C)	INSTANT. DISCHARGE (M3/S)		SINGLE SAMPLING VERTICAL (M)		TYPE OF SAMPLER	INSTANT. CONCENT. (MG/L)	DISSOLVED SOLIDS (MG/L)	PERCENT FINER THAN INDICATED SIZE, IN MILLIMETRES .002	.004	.008	.016	.031	.062	.125	.250	.500	1.00	2.00	PERCENT SAND	SILT	CLAY
JAN 04	11:30	0.6	61.4	W	122		DH48	008	301														
JAN 07	12:15	0.6	62.3	W	122		DH48	012	306														
JAN 11	11:30	0.6	102	W	122		DH48	011	311														
JAN 17	11:45	0.6	101	W	122		DH48	011	275														
JAN 22	13:30	0.0	101	W	67.1	M	DH48	010	275														
JAN 22	13:45	0.0	101	W	104	M	DH48	009	278														
JAN 22	14:05	0.0	101	W	122	M	DH48	009	285														
JAN 22	14:25	0.0	101	W	140	M	DH48	190	282														
JAN 22	14:45	0.0	101	W	158	M	DH48	018	280														
JAN 22	14:15	0.0	101	W	122		DH48	009	282														
JAN 24	13:00	0.6	92.3	W	122		DH48	012	287														
FEB 03	10:30	0.6	94.6	W	122		DH48	016	274														
FEB 07	12:30	0.6	95.7	W	122		DH48	015	271														
FEB 14	10:30	0.6	77.9	W	122		DH48	014	270														
FEB 20	13:30	0.6	83.8	W	122		DH48	012	276														
FEB 21	10:30	0.6	90.9	W	122		DH48	016	274														
FEB 28	10:15	0.6	76.5	W	122		DH48	014	268														
MAR 03	10:30	0.6	80.4	W	122		DH48	012	270														
MAR 08	09:30	0.6	79.0	W	122		DH48	015	265														
MAR 14	10:00	0.6	68.8	W	122		DH48	014	256														
MAR 19	13:05	0.0	106	W	67.1	M	DH48	055	273														
MAR 19	13:10	0.0	106	W	104	M	DH48	032	271														
MAR 19	13:20	0.0	106	W	122	M	DH48	027	274														
MAR 19	13:25	0.0	106	W	140	M	DH48	024	268														
MAR 19	13:30	0.0	106	W	158	M	DH48	027	273														
MAR 22	08:45	0.6	286	W	WERB		DH48	024	329														
MAR 25	09:00	1.1	255	W	WERB		DH48	804	297														
MAR 28	10:15	0.6	212	W	WERB		DH48	182	251														
MAR 31	09:30	0.6	269	W	WERB		DH48	092	263														
APR 02	11:45	1.1	239	W	WERB		DH48	234	278														
APR 05	10:15	1.1	450	W	WERB		DH48	861	262														
APR 07	13:15	3.9	561	H	WERB		DH48	1200	247														
APR 09	14:45	2.2	564	H	WERB		DIP	786	239														
APR 10	08:50	5.0	527	H	WERB		DIP	434	264														
APR 10	10:30	6.1	527	H	WERB		DH48	842	261														
APR 11	06:30	5.6	490	H	WERB		DH48	568	251														
APR 12	08:00	7.2	402	H	WERB		DH48	557	248														
APR 13	14:00	11.1	360	H	WERB		DH48	886	237														
APR 15	09:30	10.6	326	H	WERB		DH48	278	262														
APR 17	07:30	10.0	314	H	WERB		DH48	222	266														
APR 19	05:45	8.9	264	H	WERB		DH48	183	251														

NOTE :

DISCHARGE SYMBOL(S): H - DAILY MEAN W - DAILY MEAN; ICE CONDITIONS
VERTICAL SYMBOL(S): M - A SEDIMENT MEASUREMENT VERTICAL

(CONTINUED)

SOUTH SASKATCHEWAN RIVER AT HIGHWAY NO. 41

STATION NO. 05AK001

INSTANTANEOUS SUSPENDED SEDIMENT FOR 1969

(CONTINUED)

DATE	TIME	WATER TEMP. (C)	INSTANT. DISCHARGE (M3/S)		SINGLE SAMPLING VERTICAL (M)		TYPE OF SAMPLER	INSTANT. CONCENT. (MG/L)	DISSOLVED SOLIDS (MG/L)	PERCENT FINER THAN INDICATED SIZE, IN MILLIMETRES .002	.004	.008	.016	.031	.062	.125	.250	.500	1.00	2.00	PERCENT SAND	SILT	CLAY
APR 20	11:00	11.7	247	H	WERB		DH48	217	253														
APR 21	05:45	6.7	218	H	WERB		DH48	137	252														
APR 23	05:15	11.7	232	H	WERB		DH48	129	250														
APR 24	12:30	14.4	210	H	73.2	M	D49	150	254														
APR 24	12:35E	14.4	210	H	97.5	M	D49	157	253														
APR 24	12:40E	14.4	210	H	116	M	D49	146	257														
APR 24	12:45E	14.4	210	H	122		D49	151	256														
APR 24	12:50E	14.4	210	H	134	M	D49	144	254														
APR 24	13:00	14.4	210	H	165	M	D49	135	256														
APR 25	06:15	6.7	193	H	WERB		DH48	213	260														
APR 26	15:30	9.4	191	H	122		DH48	166	258														
APR 28	06:00	8.3	297	H	122		DH48	189	253														
APR 29	16:30	10.0	311	H	67.1	M	DH48	246	248														
APR 29	16:35	10.0	311	H	94.5	M	DH48	246	250														
APR 29	16:40	10.0	311	H	116	M	DH48	241	256														
APR 29	16:45	10.0	311	H	122		DH48	238	249														
APR 29	16:50	10.0	311	H	140	M	DH48	206	234														
APR 29	16:55	10.0	311	H	165	M	DH48	208	250														
APR 30	14:30	9.5	314	H	122		D49	448	245	28	33	50	65	77	83	88	95	98	99	100	17	50	33
MAY 01	08:00	8.9	268	H	122		DH48	340	236														
MAY 03	05:15	11.1	283	H	122		DH48	184	221														
MAY 04	08:30	11.1	232	H	122		DH48	121	223														
MAY 06	06:00	13.3	377	H	122		DH48	282	227														
MAY 07	06:15	12.8	351	H	122		DH48	248	221														
MAY 08	13:00	13.9	317	H	122		DH48	194	228														
MAY 09	06:00	14.4	340	H	122		DH48	202	233														
MAY 10	05:45	13.3	343	H	122		DH48	224	233														
MAY 11	12:30	16.1	362	H	WERB		DH48	161	226														
MAY 12	05:30	15.6	357	H	122		DH48	240	205														
MAY 13	05:45	16.7	371	H	122		DH48	168	228														
MAY 13	15:00	17.2	371	H	158	M	DH59	143	215														
MAY 13	15:05	17.2	371	H	134	M	DH59	147	227														
MAY 13	15:10	17.2	371	H	122		DH59	187	220														
MAY 13	15:15	17.2	371	H	110	M	DH59	197	222														
MAY 13	15:20	17.2	371	H	85.3	M	DH59	172	225														
MAY 13	15:25	17.2	371	H	54.9	M	DH59	157	216														
MAY 14	05:30	17.2	405	H	122		DH59	257	228														
MAY 15	17:30	15.0	456	H	WERB		DH48	209	219														
MAY 16	06:30	14.5	530	H	122		D49	521	215	12	13	22	34	50	65	78	90	96	98	100	35	52	13
MAY 16	15:00	15.0	530	H	122		D49	617	206														

NOTE :

TIME SYMBOL: E - ESTIMATED
DISCHARGE SYMBOL(S): H - DAILY MEAN
VERTICAL SYMBOL(S): M - A SEDIMENT MEASUREMENT VERTICAL

(CONTINUED)

SOUTH SASKATCHEWAN RIVER AT HIGHWAY NO. 41

STATION NO. 05AK001

INSTANTANEOUS SUSPENDED SEDIMENT FOR 1969

(CONTINUED)

DATE	TIME	WATER TEMP. (C)	INSTANT. DISCHARGE (M3/S)		SINGLE SAMPLING VERTICAL (M)		TYPE OF SAMPLER	INSTANT. CONCENT. (MG/L)	DISSOLVED SOLIDS (MG/L)	PERCENT FINER THAN INDICATED SIZE, IN MILLIMETRES .002	.004	.008	.016	.031	.062	.125	.250	.500	1.00	2.00	PERCENT SAND	SILT	CLAY
MAY 17	07:30	13.9	592	H	122		D49	1200	211														
MAY 17	13:00	13.9	592	H	122		D49	990	198														
MAY 18	08:30	13.3	648	H	WERB		DH48	334	199														
MAY 18	16:15	13.9	648	H	WERB		DH48	434	198														
MAY 19	05:15	12.8	592	H	122		D49	4580	189														
MAY 19	12:45	13.3	592	H	WERB		DH48	441	197														
MAY 20	05:00	12.2	575	H	122		D49	767	194														
MAY 20	14:30	12.2	575	H	122		D49	4190	186														
MAY 21	05:45	11.7	544	H	122		D49	574	199														
MAY 21	12:45	12.8	544	H	122		D49	541	195														
MAY 22	05:30	13.0	507	H	122		D49	436	186	19	23	35	50	61	72	86	97	100		28	49	23
MAY 22	13:30	13.3	507	H	122		D49	401	186														
MAY 23	05:15	13.9	459	H	122		D49	340	191														
MAY 23	12:30	14.4	459	H	122		D49	296	238														
MAY 24	05:00	14.4	442	H	WERB		DH48	324	195														
MAY 24	10:30	15.0	442	H	122		D49	273	198														
MAY 25	13:00	17.2	422	H	122		D49	267	198														
MAY 25	18:15	18.3	422	H	122		D49	240	197														
MAY 26	05:45	17.8	391	H	122		D49	209	202														
MAY 26	12:15	19.5	391	H	122		D49	388	193	14	22	36	63	90	98	100				2	76	22
MAY 27	05:30	17.8	382	H	122		D49	213	196														
MAY 27	17:15	17.2	382	H	WERB		DH48	130	197														
MAY 28	06:00	16.7	405	H	122		D49	218	206														
MAY 28	19:00	17.2	405	H	122		D49	254	191														
MAY 29	05:45	16.7	504	H	122		D49	371															
MAY 29	17:30	16.7	504	H	122		D49	385	202														
MAY 30	05:30	16.0	640		122		D49	481	189	13	17	26	37	52	70	86	95	99	100	30	53	17
MAY 30	16:47	16.1	620	H	54.9	M	P61	535	190	14	18	28	41	59	79	92	98	100		21	61	18
MAY 30	18:03	16.1	620	H	85.3	M	P61	611	193	09	13	23	35	51	71	86	95	99	100	29	58	13
MAY 30	18:12	16.1	620	H	110	M	P61	799	192	10	13	20	29	41	58	77	93	99	100	42	45	13
MAY 30	18:15	16.0	640		122		P61	716	189	12	18	37	44	55	71	87	92	99	100	29	53	18
MAY 30	18:18	16.1	620	H	122		D49	716	195														
MAY 30	18:22	16.1	620	H	134	M	P61	643	198	13	18	27	40	57	76	91	97	99	100	24	58	18
MAY 30	18:26	16.1	620	H	165	M	P61	579	196	14	19	27	42	61	82	96	100			18	63	19
MAY 31	08:15	15.0	609	H	WERB		DH48	158	190														
MAY 31	16:45	15.0	609	H	122		D49	747	190														
JUN 01	14:00	14.4	564	H	122		D49	544	194														
JUN 01	13:30	15.0	564	H	122		D49	504	190														
JUN 02	05:45	15.6	498	H	122		D49	394	185														

NOTE :

DISCHARGE SYMBOL(S): H - DAILY MEAN
VERTICAL SYMBOL(S): M - A SEDIMENT MEASUREMENT VERTICAL

(CONTINUED)

SOUTH SASKATCHEWAN RIVER AT HIGHWAY NO. 41

STATION NO. 05AK001

INSTANTANEOUS SUSPENDED SEDIMENT FOR 1969

(CONTINUED)

DATE	TIME	WATER TEMP. (C)	INSTANT. DISCHARGE (M3/S)		SINGLE SAMPLING VERTICAL (M)	TYPE OF SAMPLER	INSTANT. CONCENT. (MG/L)	DISSOLVED SOLIDS (MG/L)	PERCENT FINER THAN INDICATED SIZE, IN MILLIMETRES .002	.004	.008	.016	.031	.062	.125	.250	.500	1.00	2.00	PERCENT SAND	SILT	CLAY
JUN 03	04:45	16.7	501	H	122	D49	335	188														
JUN 03	12:50E	17.2	501	H	61.0 M	P61	257	194	23	28	40	51	63	74	85	96	99	100		26	46	28
JUN 03	13:10E	17.2	501	H	91.4 M	P61	329	183	15	19	30	40	49	57	75	97	100			43	38	19
JUN 03	13:27E	17.2	501	H	116 M	P61	314	185	15	20	30	41	51	61	75	90	97	99	100	39	41	20
JUN 03	13:30	17.0	498		122	D49	299	178	25	31	41	52	62	73	86	96	99	99	100	27	42	31
JUN 03	16:15E	17.2	501	H	140 M	P61	267	161	21	27	40	52	63	74	85	95	99	100		26	47	27
JUN 03	16:45	17.2	501	H	165 M	P61	240	179	21	26	43	55	67	79	94	99	100			21	53	26
JUN 03	20:00	18.3	501	H	122	D49	322	188														
JUN 04	04:45	17.8	476	H	122	D49	296	189														
JUN 04	18:00	20.0	476	H	122	D49	260	181														
JUN 05	05:00	19.4	416	H	122	D49	225	182														
JUN 05	19:00	20.6	416	H	122	D49	215	176														
JUN 06	06:00	18.3	371	H	WERB	DH48	172	182														
JUN 06	17:45	21.1	371	H	122	D49	213	180														
JUN 07	06:00	20.0	371	H	122	D49	184	176														
JUN 07	16:00	20.0	371	H	122	D49	176	172														
JUN 08	09:30	18.9	547	H	122	D49	293	176														
JUN 08	18:15	20.6	547	H	122	D49	409	169														
JUN 09	05:30	19.4	597	H	122	D49	416	169														
JUN 11	07:15	17.8	745	H	122	D49	901	169														
JUN 11	16:30	16.0	745	H	122	D49	987	174	13	17	26	39	54	73	90	98	100			27	56	17
JUN 12	07:30	14.4	694	H	122	D49	1120	186														
JUN 12	18:30	15.6	694	H	122	D49	971	165														
JUN 13	06:00	15.0	592	H	122	D49	831	157														
JUN 13	17:30	16.0	592	H	122	D49	561	168	19	25	38	54	69	81	94	100				19	56	25
JUN 14	07:30	15.6	501	H	122	D49	479	172														
JUN 14	16:00	16.7	501	H	122	D49	460	177														
JUN 15	11:45	17.2	535	H	WERB	DH48	290	171														
JUN 15	18:30	17.8	535	H	122	D49	406	172														
JUN 16	06:15	16.7	561	H	122	D49	400	175														
JUN 16	17:15	18.3	561	H	122	D49	359	175														
JUN 17	05:30	17.8	510	H	122	D49	284	174														
JUN 17	17:00	19.4	510	H	122	D49	271	175														
JUN 18	05:45	18.9	450	H	122	D49	244	169														
JUN 18	17:30	19.4	450	H	122	D49	203	168														
JUN 19	06:00	18.3	391	H	122	D49	236	175														
JUN 19	17:15	18.9	391	H	122	D49	180	174														
JUN 20	09:15	16.7	348	H	WERB	DH48	101	176														
JUN 21	13:30	17.2	297	H	122	D49	147	169														
JUN 22	11:00	17.2	279	H	122	D49	085	180														
JUN 23	06:00	16.7	314	H	122	D49	089	181														

NOTE :

TIME SYMBOL: E - ESTIMATED
DISCHARGE SYMBOL(S): H - DAILY MEAN
VERTICAL SYMBOL(S): M - A SEDIMENT MEASUREMENT VERTICAL

(CONTINUED)

SOUTH SASKATCHEWAN RIVER AT HIGHWAY NO. 41

STATION NO. 05AK001

INSTANTANEOUS SUSPENDED SEDIMENT FOR 1969

(CONTINUED)

DATE	TIME	WATER TEMP. (C)	INSTANT. DISCHARGE (M3/S)		SINGLE SAMPLING VERTICAL (M)		TYPE OF SAMPLER	INSTANT. CONCENT. (MG/L)	DISSOLVED SOLIDS (MG/L)	PERCENT FINER THAN INDICATED SIZE, IN MILLIMETRES .002	.004	.008	.016	.031	.062	.125	.250	.500	1.00	2.00	PERCENT SAND	SILT	CLAY
JUN 24	08:15	17.2	453	H	122		D49	217	190														
JUN 24	16:25	18.3	453	H	54.9	M	D49	191	181														
JUN 24	16:27E	18.3	453	H	85.3	M	D49	193	185														
JUN 24	16:30E	18.3	453	H	116	M	D49	255	180														
JUN 24	16:35E	18.3	453	H	122		D49	245	184														
JUN 24	16:40E	18.3	453	H	140	M	D49	158	181														
JUN 24	16:45	18.3	453	H	171	M	D49	167	186														
JUN 25	06:00	17.2	510	H	WERB		DH48	099	189														
JUN 25	17:00	18.3	510	H	WERB		DH48	127	185														
JUN 26	06:00	17.2	510	H	122		D49	291	180														
JUN 27	20:00	16.7	487	H	122		D49	287	182														
JUN 27	17:00	17.8	487	H	122		D49	104	186														
JUN 28	07:15	17.2	946	H	WERB		DH48	099	195														
JUN 28	15:30	18.3	946	H	WERB		DH48	543	183														
JUN 29	09:30	17.8	1470	H	WERB		DH48	1840	209														
JUN 29	18:00	16.7	1470	H	WERB		DH48	2450	212														
JUN 30	06:45	13.9	1440	H	WERB		DH48	2440	209														
JUN 30	12:45	14.5	1440	H	122		D49	3480	205														
JUN 30	18:15	15.6	1440	H	WERB		DH48	1850	207	19	24	37	49	61	75	82	88	93	96	100	25	51	24
JUL 01	06:00	14.5	1490	V	122		D49	2150	190														
JUL 01	12:45	15.0	1490	V	WERB		DH48	1380	191	23	29	44	59	73	87	96	99	100			13	58	29
JUL 01	17:45	15.6	1490	V	WERB		DH48	1450	191														
JUL 02	05:15	14.4	1880	V	WERB		DH48	1940	199														
JUL 02	11:30	15.0	1880	V	WERB		DH48	2130	208														
JUL 02	14:30	14.5	1880	V	122		D49	2710	211														
JUL 02	19:45	14.4	1880	V	WERB		DH48	2330	222	16	21	32	47	62	78	91	96	99	100		22	57	21
JUL 03	05:45	15.0	1740	V	WERB		DH48	2250	218														
JUL 03	14:15E	16.1	1740	V	42.7	M	P61	2860	211														
JUL 03	14:18	16.0	235		42.7	M	P61	2860	211														
JUL 03	14:35E	16.1	1740	V	79.2	M	P61	2710	212	15	26	38	52	64	75	86	95	99	100		25	49	26
JUL 03	14:39	16.0	407		79.2	M	P61	2710	212														
JUL 03	15:02	16.0	496		113	M	P61	2430	213	20	27	41	56	68	79	87	93	98	99	100	21	52	27
JUL 03	15:05	16.0	1740	V	122		P61	2370	214	24	30	45	61	75	87	95	99	100			13	57	30
JUL 03	15:15E	16.1	1740	V	113	M	P61	2430	213	27	32	47	64	79	90	96	98	99	100		10	58	32
JUL 03	15:20E	16.1	1740	V	122		P61	2370	214														
JUL 03	15:30	16.0	394		152	M	P61	2410	208	20	30	45	62	77	88	97	100				12	58	30
JUL 03	15:45E	16.1	1740	V	152	M	P61	2410	219														
JUL 03	16:00	16.0	212		183	M	P61	2290	220	25	33	49	66	82	94	99	100				6	61	33
JUL 03	19:15	15.6	1740	V	WERB		DH48	1910	206														

NOTE :

TIME SYMBOL: E - ESTIMATED
DISCHARGE SYMBOL(S): H - DAILY MEAN V - DAILY MEAN; MANUAL GAUGE
VERTICAL SYMBOL(S): M - A SEDIMENT MEASUREMENT VERTICAL

(CONTINUED)

SOUTH SASKATCHEWAN RIVER AT HIGHWAY NO. 41

STATION NO. 05AK001

INSTANTANEOUS SUSPENDED SEDIMENT FOR 1969

(CONTINUED)

DATE	TIME	WATER TEMP. (C)	INSTANT. DISCHARGE (M3/S)		SINGLE SAMPLING VERTICAL (M)		TYPE OF SAMPLER	INSTANT. CONCENT. (MG/L)	DISSOLVED SOLIDS (MG/L)	PERCENT FINER THAN INDICATED SIZE, IN MILLIMETRES .002	.004	.008	.016	.031	.062	.125	.250	.500	1.00	2.00	PERCENT SAND	SILT	CLAY
JUL 04	06:00	15.0	1410	V	122		D49	1770	199														
JUL 04	11:30	16.1	1410	V	122		D49	1610	201														
JUL 04	19:30	17.2	1410	V	WERB		DH48	853	203														
JUL 05	07:00	16.1	1120	H	122		D49	1180	201														
JUL 05	15:30	17.2	1120	H	WERB		DH48	822	199														
JUL 06	10:30	16.1	974	H	WERB		DH48	1070	205														
JUL 06	17:30	17.2	974	H	WERB		DH48	668	198														
JUL 07	08:00	16.7	988	H	122		D49	881	203														
JUL 08	10:00	17.2	1010	H	122		D49	698	209														
JUL 08	17:00	17.8	1010	H	122		D49	660	210														
JUL 09	06:30	17.2	1020	H	122		D49	663	212														
JUL 09	17:30	18.5	1020	H	122		D49	663	216	20	27	37	50	61	72	83	92	98	99	100	28	45	27
JUL 10	05:15	17.8	980	H	122		D49	664	213														
JUL 10	19:30	19.4	980	H	122		D49	572	207														
JUL 11	05:30	18.9	847	H	122		D49	617	212														
JUL 11	17:00	20.0	847	H	WERB		DH48	718	216														
JUL 12	05:00	19.5	767	H	122		D49	634	222	23	31	41	52	63	73	87	96	99	100		27	42	31
JUL 13	09:30	18.9	722	H	122		D49	439	214														
JUL 13	18:30	19.4	722	H	122		D49	427	223														
JUL 14	05:15	18.9	648	H	122		D49	422	222														
JUL 14	17:45	20.0	648	H	122		D49	398	222														
JUL 15	05:00	18.3	609	H	122		D49	396	225														
JUL 15	13:00	18.9	609	H	122		D49	372	223														
JUL 16	05:15	17.8	552	H	122		D49	326	221														
JUL 17	13:10	19.4	493	H	61.0	M	D49	233	227														
JUL 17	13:15	19.4	493	H	91.4	M	D49	237	227														
JUL 17	13:20	19.4	493	H	116	M	D49	248	229														
JUL 17	13:30	19.4	493	H	122		D49	239	225														
JUL 17	13:35	19.4	493	H	140	M	D49	184	231														
JUL 17	13:40	19.4	493	H	165	M	D49	177	223														
JUL 18	09:00	19.4	476	H	122		D49	231	217														
JUL 19	05:00	20.0	416	H	122		D49	241	212														
JUL 20	17:45	21.7	413	H	WERB		DH48	133	215														
JUL 21	06:30	20.6	382	H	122		D49	248	218														
JUL 22	07:30	21.1	348	H	122		D49	231	222														
JUL 23	05:45	22.2	345	H	122		D49	267	216														
JUL 24	05:30	21.7	309	H	122		D49	129	213														
JUL 25	06:15	22.8	283	H	122		D49	093	208														
JUL 26	05:45	19.4	256	H	WERB		DH48	143	229														
JUL 28	06:30	21.7	271	H	122		D49	100	211														
JUL 29	06:15	21.1	261	H	122		D49	118	222														

NOTE :

DISCHARGE SYMBOL(S): H - DAILY MEAN V - DAILY MEAN; MANUAL GAUGE
VERTICAL SYMBOL(S): M - A SEDIMENT MEASUREMENT VERTICAL

(CONTINUED)

SOUTH SASKATCHEWAN RIVER AT HIGHWAY NO. 41

STATION NO. 05AK001

INSTANTANEOUS SUSPENDED SEDIMENT FOR 1969

(CONTINUED)

DATE	TIME	WATER TEMP. (C)	INSTANT. DISCHARGE (M3/S)		SINGLE SAMPLING VERTICAL (M)		TYPE OF SAMPLER	INSTANT. CONCENT. (MG/L)	DISSOLVED SOLIDS (MG/L)	PERCENT FINER THAN INDICATED SIZE, IN MILLIMETRES .002	.004	.008	.016	.031	.062	.125	.250	.500	1.00	2.00	PERCENT SAND	SILT	CLAY
JUL 30	06:30	21.7	252	H	122		D49	081	220														
JUL 31	06:00	20.6	253	H	122		D49	074	217														
AUG 01	13:00	22.8	253	H	122		D49	089	219														
AUG 02	06:00	22.2	226	H	122		D49	054	223														
AUG 03	19:30	24.4	223	H	122		D49	049	219														
AUG 04	06:00	23.3	228	H	122		D49	055	216														
AUG 05	06:15	22.2	229	H	122		D49	063	219														
AUG 06	06:00	18.9	219	H	122		D49	079	223														
AUG 07	05:45	18.3	197	H	122		D49	067	220														
AUG 08	06:00	19.4	194	H	122		D49	060	224														
AUG 09	05:30	20.0	195	H	122		D49	039	227														
AUG 10	10:00	20.6	195	H	122		D49	045	225														
AUG 11	06:00	21.1	196	H	122		D49	036	224														
AUG 12	05:45	21.7	178	V	122		D49	045	226														
AUG 13	06:00	20.0	145	Y	122		D49	030	226														
AUG 14	05:45	19.4	118	Y	122		D49	032	224														
AUG 16	05:30	21.7	93.4	Y	122		D49	009	227														
AUG 17	17:30	19.4	131	Y	122		D49	020	229														
AUG 19	05:15	20.0	177	V	122		D49	030	233														
AUG 21	05:30	21.1	140	H	122		D49	026	233														
AUG 23	05:15	18.9	115	H	WERB		DH48	027	250														
AUG 24	10:30	20.6	104	H	122		D49	013	222														
AUG 27	12:00	21.7	90.0	H	152	M	D49	006	214														
AUG 27	12:05	21.7	90.0	H	128	M	D49	007	225														
AUG 27	12:10	21.7	90.0	H	122		D49	007	224														
AUG 27	12:15	21.7	90.0	H	110	M	D49	008	220														
AUG 27	12:20	21.7	90.0	H	91.4	M	D49	008	223														
AUG 27	12:25	21.7	90.0	H	67.1	M	D49	007	222														
AUG 28	05:00	20.0	93.2	H	122		D49	014	222														
AUG 30	06:00	17.8	78.7	H	WERB		DH48	020	233														
AUG 31	18:30	19.4	66.5	H	122		D49	009	224														
SEP 02	05:45	17.8	70.5	H	WERB		DH48	011	223														
SEP 06	06:30	15.0	72.8	H	122		D49	006	228														
SEP 07	15:30	17.8	65.4	H	WERB		DH48	011	242														
SEP 09	09:15	17.2	72.2	H	122		D49	005	230														
SEP 11	06:15	17.8	59.2	H	122		D49	009	247														
SEP 13	10:00	18.9	125	H	122		D49	014	258														
SEP 15	10:15	13.3	79.6	H	122		D49	005	262														
SEP 17	08:30	12.2	65.4	H	122		D49	008	242														
SEP 20	08:15	12.8	103	H	WERB		DH48	009	257														
SEP 23	07:30	11.7	93.2	H	122		D49	004	245														

NOTE :

DISCHARGE SYMBOL(S): H - DAILY MEAN V - DAILY MEAN; MANUAL GAUGE Y - DAILY MEAN; ESTIMATED
VERTICAL SYMBOL(S): M - A SEDIMENT MEASUREMENT VERTICAL

(CONTINUED)

SOUTH SASKATCHEWAN RIVER AT HIGHWAY NO. 41

STATION NO. 05AK001

INSTANTANEOUS SUSPENDED SEDIMENT FOR 1969

(CONTINUED)

DATE	TIME	WATER TEMP. (C)	INSTANT. DISCHARGE (M3/S)		SINGLE SAMPLING VERTICAL (M)		TYPE OF SAMPLER	INSTANT. CONCENT. (MG/L)	DISSOLVED SOLIDS (MG/L)	PERCENT FINER THAN INDICATED SIZE, IN MILLIMETRES .002	.004	.008	.016	.031	.062	.125	.250	.500	1.00	2.00	PERCENT SAND	SILT	CLAY
SEP 24	14:30	13.3	80.1	H	79.2	M	D49	007	238														
SEP 24	14:32E	13.3	80.1	H	97.5	M	D49	005	234														
SEP 24	14:35E	13.3	80.1	H	116	M	D49	006	240														
SEP 24	14:40E	13.3	80.1	H	122		D49	006	233														
SEP 24	14:45E	13.3	80.1	H	134	M	D49	003	240														
SEP 24	14:50	13.3	80.1	H	158	M	D49	006	247														
SEP 25	08:45	11.7	60.0	H	122		D49	009	246														
SEP 25	10:15	12.2	60.0	H	122		D49	002	240														
SEP 27	08:15	10.6	54.1	H	WERB		DH48	012	253														
SEP 27	08:16	10.6	54.1	H	WERB		DH48	005															
SEP 28	16:00	13.3	82.4	H	122		D49	009	247														
SEP 30	13:30	11.7	119	H	122		D49	019	277														
OCT 02	10:45	11.1	90.0	H	122		D49	011	252														
OCT 04	10:15	7.8	75.9	H	WERB		DH48	012	241														
OCT 06	08:30	8.3	81.6	H	122		D49	016	246														
OCT 08	08:45	8.3	78.2	H	122		D49	012	255														
OCT 11	08:45	3.9	66.8	H	WERB		DH48	071	277														
OCT 13	15:30	5.6	56.1	H	122		D49	015	284														
OCT 15	14:45	5.0	54.1	H	122		D49	013	285														
OCT 17	12:45	3.9	73.6	H	122		D49	019	303														
OCT 23	09:00	4.4	127	H	122		D49	015	301														
OCT 23	12:15	4.4	127	H	152	M	D49	010	302														
OCT 23	12:20	4.4	127	H	128	M	D49	010	300														
OCT 23	12:25	4.4	127	H	122		D49	012	302														
OCT 23	12:30	4.4	127	H	116	M	D49	012	301														
OCT 23	12:35	4.4	127	H	85.3	M	D49	014	298														
OCT 23	12:40	4.4	127	H	67.1	M	D49	014	303														
OCT 25	14:30	3.3	125	H	WERB		DH48	027	315														
OCT 27	15:00	1.1	96.6	H	122		D49	023	283														
OCT 30	12:00	1.1	114	H	122		D49	022	290														
OCT 31	09:15	1.1	116	H	WERB		DH48	016	287														
NOV 03	09:00	1.7	108	H	WERB		DH48	023	289														
NOV 05	08:30	3.9	110	H	WERB		DH48	066	291														
NOV 07	14:15	6.1	110	H	WERB		DH48	011	299														
NOV 10	08:15	2.8	106	H	WERB		DH48	007	294														
NOV 12	08:30	1.7	105	H	WERB		DH48	010	302														
NOV 24	09:00	0.0	62.3	W	WERB		DH48	023	307														
NOV 28	08:45	0.0	65.1	W	WERB		DH48	008	295														
DEC 01	13:30	0.0	63.1	W	WERB		DH48	012	295														
DEC 05	09:00	0.0	62.0	W	WERB		DH48	010	303														
DEC 12	09:15	0.0	53.5	W	WERB		DH48	006	346														

NOTE :

TIME SYMBOL: E - ESTIMATED
DISCHARGE SYMBOL(S): H - DAILY MEAN W - DAILY MEAN; ICE CONDITIONS
VERTICAL SYMBOL(S): M - A SEDIMENT MEASUREMENT VERTICAL

(CONTINUED)

SOUTH SASKATCHEWAN RIVER AT HIGHWAY NO. 41

STATION NO. 05AK001

INSTANTANEOUS SUSPENDED SEDIMENT FOR 1969

(CONTINUED)

DATE	TIME	WATER TEMP. (C)	INSTANT. DISCHARGE (M3/S)		SINGLE SAMPLING VERTICAL (M)		TYPE OF SAMPLER	INSTANT. CONCENT. (MG/L)	DISSOLVED SOLIDS (MG/L)	PERCENT FINER THAN INDICATED SIZE, IN MILLIMETRES .002	.004	.008	.016	.031	.062	.125	.250	.500	1.00	2.00	PERCENT SAND	SILT	CLAY
DEC 17	11:50	0.0	63.7	W	73.2	M	DH48	005	353														
DEC 17	11:55	0.0	63.7	W	97.5	M	DH48	004	346														
DEC 17	12:00	0.0	63.7	W	116	M	DH48	011	351														
DEC 17	12:05	0.0	63.7	W	122		DH48	007	372														
DEC 17	12:10	0.0	63.7	W	128	M	DH48	004	348														
DEC 17	12:15	0.0	63.7	W	158	M	DH48	006	344														
DEC 18	13:00	0.0	56.6	W	122		DH48	013	344														
DEC 26	12:45	0.0	62.3	W	122		DH48	005	310														
DEC 30	13:00	0.0	77.3	W	122		DH48	016	328														

NOTE :

DISCHARGE SYMBOL(S): W - DAILY MEAN; ICE CONDITIONS
VERTICAL SYMBOL(S): M - A SEDIMENT MEASUREMENT VERTICAL

SOUTH SASKATCHEWAN RIVER AT HIGHWAY NO. 41 STATION NO. 05AK001

INSTANTANEOUS SUSPENDED SEDIMENT FOR 1970

DATE	TIME	WATER TEMP. (C)	INSTANT. DISCHARGE (M3/S)		SINGLE SAMPLING VERTICAL (M)		TYPE OF SAMPLER	INSTANT. CONCENT. (MG/L)	DISSOLVED SOLIDS (MG/L)	PERCENT FINER THAN INDICATED SIZE, IN MILLIMETRES .002	.004	.008	.016	.031	.062	.125	.250	.500	1.00	2.00	PERCENT SAND	SILT	CLAY
JAN 02	10:15	0.0	81.0	W	122		DH48	006	331														
JAN 09	12:45	0.0	64.6	W	122		DH48	009	325														
JAN 16	13:00	0.0	66.5	W	122		DH48	004	335														
JAN 22	10:45	0.0	61.4	W	122		DH48	006	345														
JAN 28	16:50	0.0	56.1	W	122		DH48	006	349														
JAN 29	10:30	0.0	57.8	W	122		DH48	011	340														
FEB 05	10:00	0.0	59.7	W	122		DH48	009	321														
FEB 12	10:30	0.0	68.2	W	122		DH48	007	291														
FEB 21	09:45	0.0	73.3	W	122		DH48	008	276														
FEB 25	15:15	0.0	96.0	W	67.1	M	DH48	010	266														
FEB 25	15:20	0.0	96.0	W	97.5	M	DH48	012	272														
FEB 25	15:25	0.0	96.0	W	116	M	DH48	010	269														
FEB 25	15:30	0.0	96.0	W	122		DH48	013	268														
FEB 25	15:40	0.0	96.0	W	128	M	DH48	010	272														
FEB 25	15:45	0.0	96.0	W	152	M	DH48	011	273														
FEB 27	10:00	0.0	100	W	122		DH48	018	267														
MAR 06	09:30	0.0	75.0	W	122		DH48	008	268														
MAR 13	12:45	0.0	93.4	W	122		DH48	017	272														
MAR 20	08:15	0.0	88.6	W	122		DH48	027	248														
MAR 27	08:00	0.0	130		WERB		DH48	018	251														
APR 01	15:15	0.0	125		122		DH48	020	246														
APR 03	12:45	0.2	122		WERB		DH48	112	250														
APR 07	13:45	0.6	109		WERB		DH48	105	238														
APR 08	14:15	0.1	120		WERB		DH48	042	222														
APR 09	08:15	0.4	182		WERB		DH48	042	217														
APR 10	14:45	0.8	182		WERB		DH48	121	226														
APR 11	11:00	0.1	149		WERB		DH48	064	236														
APR 13	08:00	0.1	176		WERB		DH48	058	256														
APR 14	09:15	0.1	167		WERB		DH48	049	249														
APR 14	10:50	2.5	167		MID		D49	079	255														
APR 15	09:15	0.1	163		WERB		DH48	023	264														
APR 16	13:45	5.1	160		WERB		DH48	036	275														
APR 17	10:00	5.5	156		WERB		DH48	032	269														
APR 18	06:00	0.1	152		WERB		DH48	040	276														
APR 20	06:30	0.5	145		WERB		DH48	030	275														
APR 21	09:30	6.8	141		WERB		DH48	027	276														
APR 21	10:00	6.8	141		58.5		DH48	037	262														
APR 22	06:30	4.3	137	H	WERB		DH48	030	280														
APR 24	05:30	5.1	105	H	WERB		DH48	187	283														
APR 26	09:30	5.4	112	H	WERB		DH48	010	278														

NOTE :

DISCHARGE SYMBOL(S): H - DAILY MEAN V - DAILY MEAN; MANUAL GAUGE W - DAILY MEAN; ICE CONDITIONS
V - DAILY MEAN; ESTIMATED

VERTICAL SYMBOL(S): M - A SEDIMENT MEASUREMENT VERTICAL

(CONTINUED)

SOUTH SASKATCHEWAN RIVER AT HIGHWAY NO. 41

STATION NO. 05AK001

INSTANTANEOUS SUSPENDED SEDIMENT FOR 1970

(CONTINUED)

DATE	TIME	WATER TEMP. (C)	INSTANT. DISCHARGE (M3/S)		SINGLE SAMPLING VERTICAL (M)		TYPE OF SAMPLER	INSTANT. CONCENT. (MG/L)	DISSOLVED SOLIDS (MG/L)	PERCENT FINER THAN INDICATED SIZE, IN MILLIMETRES .002	.004	.008	.016	.031	.062	.125	.250	.500	1.00	2.00	PERCENT SAND	SILT	CLAY
APR 28	06:00	5.0	140	H	WERB		DH48	026	285														
APR 28	15:25E	6.8	140	H	67.1	M	DH59	052	289														
APR 28	15:30	6.8	140	H	91.4	M	DH59	050	293														
APR 28	15:32E	6.8	140	H	110	M	DH59	046	293														
APR 28	15:35	6.8	140	H	122		DH59	044	283														
APR 28	15:37E	6.8	140	H	128	M	DH59	044	292														
APR 28	15:40	6.8	140	H	152	M	DH59	038	290														
APR 28	15:41E	6.8	140	H	9.1	X	DH48	045	288														
APR 28	16:30	6.8	140	H	MID	X	DH48	046	287														
APR 29	09:15	6.2	146	H	122		DH48	026	289														
APR 29	09:20	6.2	146	H	122		DH59	043	285														
APR 29	09:25	6.2	146	H	58.5	X	DH59	046	291														
APR 30	06:45	5.2	138	H	122		DH59	039	294														
MAY 02	05:30	1.0	104	H	122		DH59	019	288														
MAY 03	14:30	1.0	83.0	H	122		DH59	015	265														
MAY 05	05:45	1.0	105	H	WERB		DH48	009	265														
MAY 07	05:45	1.1	104	H	122		DH48	008	289														
MAY 09	08:00	1.0	161	H	WERB		DH48	063	283														
MAY 10	08:15	1.0	279	H	WERB		DH48	086	284														
MAY 11	08:45	1.0	351	H	WERB		DH48	138	309														
MAY 12	08:15	5.3	365	H	122		D49	569	222	15	23	38	60	79	88	95	99	100			12	65	23
MAY 13	08:00	5.4	368	H	122		DH59	601	221														
MAY 14	07:15	11.	348	H	122		DH59	420	218														
MAY 14	11:30	11.	348	H	158	M	D49	361	222														
MAY 14	11:40E	11.	348	H	128	M	D49	378	210														
MAY 14	11:45E	11.	348	H	122		D49	416	215														
MAY 14	11:50E	11.	348	H	110	M	D49	413	226														
MAY 14	12:00	11.	348	H	85.3	M	D49	392	221														
MAY 14	12:05E	11.	348	H	54.9	M	D49	400	217														
MAY 15	09:30	10.	328	H	122		D49	340	210														
MAY 16	08:00	10.	292	H	122		D49	294	207														
MAY 17	08:15	10.	297	H	122		D49	271	208														
MAY 18	05:15	11.	297	H	122		D49	269	215														
MAY 19	05:45	10.	283	H	WERB		DH48	150	221														
MAY 20	05:30	10.	343	H	122		D49	198	233														
MAY 21	05:15	11.	453	H	122		D49	411	227														
MAY 21	20:00	10.	453	H	122		D49	590	224														
MAY 22	05:30	10.5	453	H	122		D49	709	224	10	14	27	47	64	74	83	91	95	97	100	26	60	14
MAY 23	06:45	10.	439	H	WERB		DH48	483	194														
MAY 23	17:30	15.	439	H	122		D49	730	198														

NOTE :

TIME SYMBOL: E - ESTIMATED
DISCHARGE SYMBOL(S): H - DAILY MEAN
VERTICAL SYMBOL(S): M - A SEDIMENT MEASUREMENT VERTICAL X - NOT AT REGULAR SINGLE SAMPLE VERTICAL

(CONTINUED)

SOUTH SASKATCHEWAN RIVER AT HIGHWAY NO. 41

STATION NO. 05AK001

(CONTINUED)

INSTANTANEOUS SUSPENDED SEDIMENT FOR 1970

DATE	TIME	WATER TEMP. (C)	INSTANT. DISCHARGE (M3/S)		SINGLE SAMPLING VERTICAL (M)		TYPE OF SAMPLER	INSTANT. CONCENT. (MG/L)	DISSOLVED SOLIDS (MG/L)	PERCENT FINER THAN INDICATED SIZE, IN MILLIMETRES .002	.004	.008	.016	.031	.062	.125	.250	.500	1.00	2.00	PERCENT SAND	SILT	CLAY
MAY 24	08:00	15.	413	H	122		D49	533	194														
MAY 24	17:15	15.	413	H	122		D49	507	185														
MAY 25	05:45	15.	430	H	122		D49	482	187														
MAY 25	17:00	15.	430	H	122		D49	489	185														
MAY 26	05:00	13.	447	H	WERB		DH48	288	182														
MAY 26	12:00	15.2	105		64.0	M	D49	648	172	11	18	27	37	47	58	65	73	81	88	100	42	40	18
MAY 26	12:05	15.2	90.1		97.5	M	D49	431	176	17	26	39	55	70	81	89	96	99	100		19	55	26
MAY 26	12:10E	15.	447	H	116	M	D49	509	182														
MAY 26	12:15	15.2	87.6		116	M	D49	509	182	14	31	34	50	62	70	80	91	95	98	100	30	39	31
MAY 26	12:20	15.2	447	H	122		D49	454	177	18	24	37	53	67	79	88	95	98	100		21	55	24
MAY 26	12:25	15.2	96.7		140	M	D49	397	187	19	27	43	62	78	89	94	97	99	100		11	62	27
MAY 26	12:30	15.2	70.7		170	M	D49	397	188	22	34	50	66	82	93	98	99	100			7	59	34
MAY 26	17:30	15.	447	H	122		D49	464	206														
MAY 27	05:45	15.	467	H	122		D49	446	198														
MAY 27	17:30	15.	467	H	122		D49	560	197														
MAY 28	05:45	1.5	459	H	122		D49	498	201														
MAY 29	07:00	1.4	479	H	122		D49	578	185														
MAY 29	17:30	1.5	479	H	122		D49	552	187														
MAY 30	06:30	1.5	530	H	122		D49	466	182														
MAY 30	16:45	15.1	530	H	122		D49	665	182	13	19	30	45	59	73	83	91	95	97	100	27	54	19
MAY 31	07:30	1.5	544	H	122		D49	836	177														
MAY 31	18:00	15.2	544	H	122		D49	888	176	18	26	38	53	68	80	86	92	95	96	100	20	54	26
JUN 01	05:15	1.5	487	H	122		D49	775	199														
JUN 01	18:00E	1.5	487	H	122		D49	724	192														
JUN 02	06:30	1.5	433	H	122		D49	481	190														
JUN 02	18:00	1.5	433	H	122		D49	427	191														
JUN 03	06:00	1.5	379	H	122		D49	340	192														
JUN 03	17:00	2.0	379	H	122		D49	287	192														
JUN 04	18:00	2.0	326	H	122		D49	254	176														
JUN 05	05:00	2.1	269	H	122		D49	218	184														
JUN 06	05:15	2.1	311	H	122		D49	187	174														
JUN 07	07:00	2.1	362	H	122		D49	251	181														
JUN 08	05:30	2.1	481	H	122		D49	312	172														
JUN 08	13:00	2.2	481	H	122		D49	321	170														
JUN 09	04:30	2.0	544	H	WERB		D49	228	170														
JUN 09	13:15	20.8	81.5		165	M	P61	377	188	14	20	33	52	72	88	97	99	100			12	68	20
JUN 09	13:25	20.8	133		140	M	P61	384	182	9	17	34	53	74	88	96	99	100			12	71	17
JUN 09	13:40	20.8	102		116	M	P61	522	171	11	17	30	43	55	66	77	92	98	99	100	34	49	17
JUN 09	13:45	20.8	544	H	122		P61	499	162	10	18	29	43	58	72	83	90	94	95	100	28	54	18
JUN 09	14:45	20.8	139		85.3	M	P61	489	167	12	20	31	46	60	75	85	94	98	99	100	25	55	20
JUN 09	15:00	20.8	92.8		54.9	M	P61	458	163	15	22	34	49	64	91	96	98	99	100		9	69	22

NOTE :

TIME SYMBOL: E - ESTIMATED
DISCHARGE SYMBOL(S): H - DAILY MEAN
VERTICAL SYMBOL(S): M - A SEDIMENT MEASUREMENT VERTICAL

(CONTINUED)

SOUTH SASKATCHEWAN RIVER AT HIGHWAY NO. 41

STATION NO. 05AK001

INSTANTANEOUS SUSPENDED SEDIMENT FOR 1970

(CONTINUED)

DATE	TIME	WATER TEMP. (C)	INSTANT. DISCHARGE (M3/S)		SINGLE SAMPLING VERTICAL (M)		TYPE OF SAMPLER	INSTANT. CONCENT. (MG/L)	DISSOLVED SOLIDS (MG/L)	PERCENT FINER THAN INDICATED SIZE, IN MILLIMETRES .002	.004	.008	.016	.031	.062	.125	.250	.500	1.00	2.00	PERCENT SAND	SILT	CLAY
JUN 10	10:30	20.8	527	H	122		D49	454	192														
JUN 10	16:30	19.4	527	H	WERB		DH48	130	174														
JUN 11	06:30	17.2	527	H	WERB		DH48	204	174														
JUN 11	10:10	17.2	527	H	122		D49	552	171														
JUN 11	16:30	17.8	527	H	122		D49	735	184														
JUN 12	06:00	16.7	498	H	122		D49	770	178														
JUN 13	08:45	15.6	493	H	WERB		DH48	191	171														
JUN 13	15:45	16.7	493	H	WERB		DH48	375	175														
JUN 14	09:00	16.1	496	H	122		D49	379	088														
JUN 14	15:00	16.7	496	H	122		D49	432	170														
JUN 15	17:00	17.2	428	H	122		D49	1090	145														
JUN 16	08:30	16.7	623	H	122		D49	2570	173														
JUN 16	19:00	17.8	623	H	122		D49	1140	135														
JUN 17	06:30	17.0	1290	H	122		D49	3340	212	9	12	18	26	39	61	74	82	86	90	100	39	49	12
JUN 17	11:45	16.7	1290	H	WERB		DH48	1470	211														
JUN 17	15:30	17.8	1290	H	122		D49	5490	207														
JUN 17	18:30	17.2	1290	H	WERB		DH48	2010	208														
JUN 18	05:45	16.1	1340	H	122		D49	4070	131														
JUN 18	12:50	16.8	1340	H	48.8	M	P61	3270	224														
JUN 18	13:20	16.8	1340	H	79.2	M	P61	3340	208														
JUN 18	13:35	16.8	1340	H	110	M	P61	2920	212														
JUN 18	13:40	16.8	1340	H	122		P61	2940	214														
JUN 18	14:20	16.8	1340	H	146	M	P61	2970	203														
JUN 18	14:40	16.8	1340	H	183	M	P61	2800	216														
JUN 19	10:15	10.5	1230	H	122		D49	2210	198														
JUN 19	15:00	10.5	1230	H	122		D49	3690	194														
JUN 19	19:00	10.5	1230	H	122		D49	1710	193														
JUN 20	14:00	10.5	1280	H	122		D49	1350	184														
JUN 21	09:30	10.5	1110	H	122		D49	1250	187														
JUN 21	11:30	15.0	1110	H	122		D49	1120	192	22	28	39	55	70	86	94	98	99	100		14	58	28
JUN 21	14:30	10.5	1110	H	122		D49	1150	191														
JUN 21	17:00	10.5	1110	H	122		D49	1200	189														
JUN 22	05:30	10.5	886	H	122		D49	971	185														
JUN 22	13:30	20.0	886	H	122		D49	862	177														
JUN 23	06:00	10.5	765	H	122		D49	847	183														
JUN 23	12:00	20	765	H	122		D49	986	186														
JUN 23	18:00	20	765	H	122		D49	727	182														
JUN 24	05:45	20	688	H	122		D49	601	182														
JUN 24	12:15	20	688	H	122		D49	631	181														
JUN 24	17:45	20	688	H	122		D49	588	197														
JUN 25	05:00	20	620	H	122		D49	659	186														

NOTE :

DISCHARGE SYMBOL(S): H - DAILY MEAN
VERTICAL SYMBOL(S): M - A SEDIMENT MEASUREMENT VERTICAL

(CONTINUED)

SOUTH SASKATCHEWAN RIVER AT HIGHWAY NO. 41

STATION NO. 05AK001

INSTANTANEOUS SUSPENDED SEDIMENT FOR 1970

(CONTINUED)

DATE	TIME	WATER TEMP. (C)	INSTANT. DISCHARGE (M3/S)		SINGLE SAMPLING VERTICAL (M)	TYPE OF SAMPLER	INSTANT. CONCENT. (MG/L)	DISSOLVED SOLIDS (MG/L)	PERCENT FINER THAN INDICATED SIZE, IN MILLIMETRES .002	.004	.008	.016	.031	.062	.125	.250	.500	1.00	2.00	PERCENT SAND	SILT	CLAY
JUN 26	09:45	20	572	H	122	D49	409	177														
JUN 26	18:00	20	572	H	122	D49	378	179														
JUN 27	09:15	20	527	H	122	D49	351	190														
JUN 27	17:15	20	527	H	122	D49	392	181														
JUN 28	12:00	20.2	515	H	WERB	DH48	1110	191														
JUN 28	17:00	20.3	515	H	122	D49	567	177														
JUN 29	05:30	20.2	481	H	3.4 X	D49	362	181														
JUN 29	19:15	20.1	481	H	3.4 X	D49	338	179														
JUN 30	06:30	20.0	467	H	122	D49	406	174														
JUN 30	18:45	10.5	467	H	WERB	DH48	668	183														
JUL 01	08:45	10.5	439	H	WERB	DH48	1870	212														
JUL 01	17:30	15.2	439	H	122	D49	973	196	37	42	51	64	75	85	92	97	100			15	43	42
JUL 02	06:00	10.5	433	H	122	D49	450	186														
JUL 02	17:45	10.5	433	H	122	D49	400	183														
JUL 03	06:15	10.5	484	H	122	D49	898	192														
JUL 03	16:30	10.5	484	H	122	D49	391	193														
JUL 04	13:00	11.1	510	H	122	D49	386	214														
JUL 04	16:30	20	510	H	122	D49	1170	197														
JUL 05	09:50	20	530	H	122	D49	2460	214														
JUL 05	13:15	20	530	H	122	D49	449	215														
JUL 06	07:15	20	456	H	WERB	DH48	156	208														
JUL 06	20:00	20	456	H	122	D49	202	208														
JUL 07	06:45	20	371	H	122	D49	261	205														
JUL 07	11:05	22.3	371	H	122	D49	155	195														
JUL 08	06:15	20.3	340	V	122	D49	143	199														
JUL 09	05:00	20.5	328	V	122	D49	115	196														
JUL 10	05:30	23.2	314	V	122	D49	095	200														
JUL 11	15:30	25.3	247	V	122	D49	047	196														
JUL 12	18:00	20.5	231	Y	122	D49	036	194														
JUL 13	05:45	20.4	215	V	122	D49	042	195														
JUL 14	06:00	20.2	198	V	122	D49	032	178														
JUL 15	06:30	20.2	208	H	122	D49	034	196														
JUL 16	08:00	20.3	201	H	122	D49	033	200														
JUL 17	05:30	20.5	209	H	122	D49	031	202														
JUL 18	05:45	20.4	195	H	122	D49	032	198														
JUL 19	18:30	20.3	178	H	122	D49	028	208														
JUL 20	09:00	20.2	170	H	122	D49	027	209														
JUL 21	05:15	20.3	150	H	122	D49	019	206														

NOTE :

DISCHARGE SYMBOL(S): H - DAILY MEAN V - DAILY MEAN; MANUAL GAUGE Y - DAILY MEAN; ESTIMATED
VERTICAL SYMBOL(S): X - NOT AT REGULAR SINGLE SAMPLE VERTICAL

(CONTINUED)

SOUTH SASKATCHEWAN RIVER AT HIGHWAY NO. 41

STATION NO. 05AK001

INSTANTANEOUS SUSPENDED SEDIMENT FOR 1970

(CONTINUED)

DATE	TIME	WATER TEMP. (C)	INSTANT. DISCHARGE (M3/S)		SINGLE SAMPLING VERTICAL (M)		TYPE OF SAMPLER	INSTANT. CONCENT. (MG/L)	DISSOLVED SOLIDS (MG/L)	PERCENT FINER THAN INDICATED SIZE, IN MILLIMETRES .002	.004	.008	.016	.031	.062	.125	.250	.500	1.00	2.00	PERCENT SAND	SILT	CLAY
JUL 22	06:15	20.3	151	H	122		D49	031	216														
JUL 22	13:05	23.2	151	H	73.2	M	D49	020	206														
JUL 22	13:10	23.2	151	H	97.5	M	D49	021	203														
JUL 22	13:15	23.2	151	H	116	M	D49	025	208														
JUL 22	13:20	23.2	151	H	122		D49	024	210														
JUL 22	13:25	23.2	151	H	134	M	D49	020	207														
JUL 22	13:30	23.2	151	H	158	M	D49	017	206														
JUL 23	05:45	20.2	148	H	122		D49	026	205														
JUL 24	05:15	20.2	163	H	122		D49	032	207														
JUL 25	05:00	20.2	177	H	122		D49	026	215														
JUL 26	18:00	20.3	208	H	122		D49	048	213														
JUL 27	05:15	20.1	186	H	122		D49	042	211														
JUL 28	15:30	20.2	158	H	122		D49	026	213														
JUL 29	06:00	20.2	178	H	122		D49	034	207														
JUL 30	05:30	20.1	170	H	122		D49	034	208														
JUL 31	05:45	20.0	149	H	122		D49	034	213														
AUG 01	04:45	20.0	141	H	122		D49	116	225														
AUG 03	05:15	20.1	137	H	122		D49	015	214														
AUG 04	05:30	20.2	133	H	122		D49	016	219														
AUG 05	06:00	20.2	151	H	122		D49	019	211														
AUG 06	05:30	20.2	154	H	122		D49	020	203														
AUG 08	09:00	20.2	124	H	122		D49	012	204														
AUG 09	18:00	20.1	113	H	122		D49	009	207														
AUG 10	05:15	20.0	103	H	122		D49	010	208														
AUG 13	05:30	20.2	116	H	122		D49	010	217														
AUG 15	05:45	20.2	110	H	122		D49	034	227														
AUG 16	18:30	20.1	106	H	122		D49	011	212														
AUG 23	14:45	20.3	62.9	H	WERB		DH48	014	277														
AUG 26	13:45	21.0	68.8	H	79.2	M	D49	006	237														
AUG 26	13:48	21.0	68.8	H	104	M	D49	009	225														
AUG 26	13:50	21.0	68.8	H	119	M	D49	006	232														
AUG 26	13:52	21.0	68.8	H	122		D49	007	231														
AUG 26	13:55	21.0	68.8	H	134	M	D49	005	232														
AUG 26	14:00	21.0	68.8	H	158	M	D49	006	228														
AUG 27	06:10	20.0	60.3	H	122		D49	007	226														
AUG 29	08:45	10.5	54.4	H	122		D49	005	238														
AUG 30	05:30	10.5	51.3	H	122		D49	004	252														
SEP 02	06:00	10.4	54.1	H	122		D49	005	245														
SEP 05	07:00	10.5	52.4	H	122		D49	004	269														
SEP 06	07:30	10.5	47.3	H	122		D49	002	264														
SEP 08	07:00	10.5	43.6	H	122		D49	002	273														

NOTE :

DISCHARGE SYMBOL(S): H - DAILY MEAN
VERTICAL SYMBOL(S): M - A SEDIMENT MEASUREMENT VERTICAL

(CONTINUED)

SOUTH SASKATCHEWAN RIVER AT HIGHWAY NO. 41

STATION NO. 05AK001

INSTANTANEOUS SUSPENDED SEDIMENT FOR 1970

(CONTINUED)

DATE	TIME	WATER TEMP. (C)	INSTANT. DISCHARGE (M3/S)		SINGLE SAMPLING VERTICAL (M)		TYPE OF SAMPLER	INSTANT. CONCENT. (MG/L)	DISSOLVED SOLIDS (MG/L)	PERCENT FINER THAN INDICATED SIZE, IN MILLIMETRES .002	.004	.008	.016	.031	.062	.125	.250	.500	1.00	2.00	PERCENT SAND	SILT	CLAY
SEP 09	13:45	14.9	45.0	H	122		D49	003	268														
SEP 10	06:45	13.2	53.8	H	122		D49	008	262														
SEP 12	08:45	15.3	55.8	H	122		D49	485	257														
SEP 13	17:30	15.3	52.4	H	122		D49	020	259														
SEP 15	08:00	15.3	69.7	H	122		D49	015	262														
SEP 17	05:45	10.1	51.3	H	122		D49	009	270														
SEP 19	07:45	10.3	42.2	H	122		D49	013	276														
SEP 21	17:15	10.2	38.8	H	122		D49	018	280														
SEP 22	15:15	10.2	38.5	H	122		D49	008	277														
SEP 26	12:45	10.0	55.5	H	122		D49	012	275														
SEP 27	17:45	10.2	53.2	H	122		D49	006	297														
SEP 28	14:45	10.3	45.9	H	122		D49	005	320														
SEP 29	13:35	14.2	41.9	H	152		D49	004	310														
SEP 29	13:38	14.2	41.9	H	128		D49	005	308														
SEP 29	13:40	14.2	41.9	H	122		D49	003	307														
SEP 29	13:42	14.2	41.9	H	116		D49	006	302														
SEP 29	13:45	14.2	41.9	H	97.5		D49	004	312														
SEP 29	13:50	14.2	41.9	H	73.2		D49	004	330														
SEP 30	19:45	12.2	38.2	H	122		D49	004	321														
OCT 01	13:30	13.2	36.5	H	122		D49	004	311														
OCT 03	11:00	12.4	37.7	H	122		D49	007	299														
OCT 04	17:30	13.3	38.2	H	122		D49	006	290														
OCT 08	08:30	4.3	72.5	H	122		D49	015	306														
OCT 10	08:45	3.3	65.1	H	122		D49	010	305														
OCT 11	14:00	5.1	58.9	H	122		D49	006	290														
OCT 14	09:30	4.3	50.4	H	122		D49	008	273														
OCT 15	14:15	5.4	65.7	H	122		D49	007	273														
OCT 17	14:30	5.1	79.6	H	122		D49	007	300														
OCT 18	15:00	5.1	79.3	H	122		D49	010	302														
OCT 20	08:00	5.1	103	H	122		D49	023	266														
OCT 22	10:30	5.1	87.8	H	122		D49	013	275														
OCT 24	09:00	5.1	93.7	H	122		D49	017	269														
OCT 28	11:30	1.3	130	H	122		D49	023	260														
OCT 30	14:00	1.1	131	H	122		D49	027	254														
OCT 31	12:45	1.2	135	H	122		D49	028	264														
NOV 02	13:00	1.3	130	H	122		D49	020	258														
NOV 03	11:45	1.4	130	H	73.2	M	D49	019	249														
NOV 03	11:49	1.4	130	H	104	M	D49	020	247														
NOV 03	11:55	1.4	130	H	122		D49	020	252														
NOV 03	12:00	1.4	130	H	140	M	D49	016	247														
NOV 03	12:05	1.4	130	H	165	M	D49	016	253														

NOTE :

DISCHARGE SYMBOL(S): H - DAILY MEAN
VERTICAL SYMBOL(S): M - A SEDIMENT MEASUREMENT VERTICAL

(CONTINUED)

SOUTH SASKATCHEWAN RIVER AT HIGHWAY NO. 41

STATION NO. 05AK001

INSTANTANEOUS SUSPENDED SEDIMENT FOR 1970

(CONTINUED)

DATE	TIME	WATER TEMP. (C)	INSTANT. DISCHARGE (M3/S)		SINGLE SAMPLING VERTICAL (M)	TYPE OF SAMPLER	INSTANT. CONCENT. (MG/L)	DISSOLVED SOLIDS (MG/L)	PERCENT FINER THAN INDICATED SIZE, IN MILLIMETRES .002	.004	.008	.016	.031	.062	.125	.250	.500	1.00	2.00	PERCENT SAND	SILT	CLAY
NOV 05	09:15	0.6	114	H	WERB	DH48	071	225														
NOV 07	09:00	1.1	98.5	H	WERB	DH48	002	254														
NOV 10	08:45	0.6	132	H	WERB	DH48	015	257														
NOV 12	08:15	1.1	122	H	WERB	DH48	036	266														
NOV 14	12:30	0.6	125	H	WERB	DH48	016	261														
NOV 17	08:15	1.1	122	H	WERB	DH48	022	245														
NOV 19	08:00	0.6	133	H	WERB	DH48	015	248														
NOV 20	09:15	0.0	109	H	WERB	DH48	115	258														
NOV 25	16:15	0.0	49.6	W	122	D49	003	281														
NOV 27	09:45	0.0	32.6	W	122	D49	008	300														
DEC 03	09:15	0.0	43.0	W	122	D49	010	337														
DEC 11	10:00	0.0	77.0	W	122	D49	044	307														
DEC 15	09:55	0.0	89.5	W	122	D49	009	310														
DEC 17	11:00	0.0	82.4	W	122	D49	009	305														
DEC 23	10:15	0.0	65.1	W	122	D49	006	287														
DEC 29	15:00		118	W	122	D49	013	283														
DEC 30	10:15	0.0	127	W	122	D49	018	289														

NOTE :

DISCHARGE SYMBOL(S): H - DAILY MEAN W - DAILY MEAN; ICE CONDITIONS

SOUTH SASKATCHEWAN RIVER AT HIGHWAY NO. 41 STATION NO. 05AK001

INSTANTANEOUS SUSPENDED SEDIMENT FOR 1971

DATE	TIME	WATER TEMP. (C)	INSTANT. DISCHARGE (M3/S)		SINGLE SAMPLING VERTICAL (M)		TYPE OF SAMPLER	INSTANT. CONCENT. (MG/L)	DISSOLVED SOLIDS (MG/L)	PERCENT FINER THAN INDICATED SIZE, IN MILLIMETRES .002	.004	.008	.016	.031	.062	.125	.250	.500	1.00	2.00	PERCENT SAND	SILT	CLAY
JAN 07	10:20	0.0	70.8	W	122		D49	6	272														
JAN 16	10:30	0.0	74.2	W	122		D49	11	290														
JAN 20	10:15	0.0	60.9	W	122		D49	8	271														
JAN 27	13:30	0.0	59.5	W	122		D49	7	292														
JAN 29	10:30	0.0	70.2	W	122		D49	13	285														
FEB 09	10:00	0.0	65.4	W	122		D49	15	270														
FEB 12	09:45	0.0	62.6	W	122		D49	10	265														
FEB 14	09:15	0.0	54.1	W	WERB		DH48	34	344														
FEB 24	15:30	0.0	122	W	WERB		DIP	99	296														
FEB 26	09:30	0.0	110	W	WERB		DIP	53	374														
MAR 06	10:15	0.0	56.1	W	WERB		DIP	11	524														
MAR 12	10:15	0.0	69.1	W	WERB		DH48	59	412														
MAR 16	12:00	0.0	99.1	W	122		DH48	21	266														
MAR 19	09:00	0.0	135	W	WERB		DH48	49	313														
MAR 25	09:00	0.0	121	W	WERB		DH48	19	301														
MAR 30	07:45	0.0	88.9	W	WERB		DH48	79	335														
MAR 30	11:30	0.0	88.9	W	158	M	D49	46	269														
MAR 30	11:35	0.0	88.9	W	134	M	D49	31	268														
MAR 30	11:45	0.0	88.9	W	122		D49	31	268														
MAR 30	11:55	0.0	88.9	W	116	M	D49	35	273														
MAR 30	12:05	0.0	88.9	W	97.5	M	D49	35	261														
MAR 30	12:15	0.0	88.9	W	67.1	M	D49	54	258														
APR 02	08:45	00	162	W	WERB		DH48	41	306														
APR 02	08:46	00	162	W	WERB		DH48	38															
APR 06	10:00	00	214	W	WERB		DH48	447	245														
APR 08	14:30	1.7	212	W	WERB		DH48	115	279														
APR 09	08:45	4.4	214	W	WERB		DH48	195	219														
APR 10	09:30	1.7	222	W	WERB		DIP	153	235														
APR 11	10:15	7.2	391	W	WERB		DH48	455	240														
APR 11	13:40	7.2	391	W	58.5		D49	999	218														
APR 12	06:45	1.7	450	V	WERB		DH48	841	236														
APR 12	09:55	1.7	450	V	WERB		DH48	443	228														
APR 12	09:30		450	V	58.5		D49	829	224														
APR 13	08:00	4.4	391	H	WERB		DH48	496	236														
APR 13	09:45	4.4	391	H	58.5		D49	772	217														
APR 14	07:00	7.2	326	H	WERB		DH48	434	278														
APR 15	06:45	12.8	279	H	WERB		DH48	429	269														
APR 16	08:30	10.0	241	H	WERB		DH48	345	267														
APR 16	15:10	5.0	241	H	122		D49	414	249														
APR 17	07:00	4.4	203	H	WERB		DH48	282	327	33	46	67	86	91	93	95	99	100			7	47	46
APR 18	11:30	1.7	189	H	WERB		DH48	149	337														

NOTE :

DISCHARGE SYMBOL(S): H - DAILY MEAN V - DAILY MEAN; MANUAL GAUGE W - DAILY MEAN; ICE CONDITIONS
VERTICAL SYMBOL(S): M - A SEDIMENT MEASUREMENT VERTICAL

(CONTINUED)

SOUTH SASKATCHEWAN RIVER AT HIGHWAY NO. 41

STATION NO. 05AK001

INSTANTANEOUS SUSPENDED SEDIMENT FOR 1971

(CONTINUED)

DATE	TIME	WATER TEMP. (C)	INSTANT. DISCHARGE (M3/S)		SINGLE SAMPLING VERTICAL (M)		TYPE OF SAMPLER	INSTANT. CONCENT. (MG/L)	DISSOLVED SOLIDS (MG/L)	PERCENT FINER THAN INDICATED SIZE, IN MILLIMETRES .002	.004	.008	.016	.031	.062	.125	.250	.500	1.00	2.00	PERCENT SAND	SILT	CLAY
APR 19	06:45	10.0	203	H	WERB		DH48	197	337														
APR 21	06:30	4.4	185	H	WERB		DH48	183	291														
APR 21	11:15	21.1	185	H	58.5		DH59	219	246														
APR 22	06:00	17.8	163	H	58.5		DH59	223	262														
APR 23	11:30	10.1	147	H	58.5		DH59	180	265														
APR 24	06:00	10.0	130	H	58.5		DH59	162	264														
APR 25	08:00	11.7	130	H	58.5		DH59	65	260														
APR 26	05:15	11.1	185	H	58.5		DH59	108	277														
APR 27	07:45	10.6	223	H	58.5		DH59	158	285														
APR 28	06:15	11.1	208	H	58.5		DH59	136	287														
APR 29	05:15	11.7	272	H	58.5		DH59	134	274														
APR 30	07:00	26.7	289	H	58.5		DH59	238	263														
MAY 01	06:15	21.1	260	H	58.5		DH59	204	308														
MAY 01	14:00	16.5	260	H	158	M	D49	106	226														
MAY 01	14:10	16.5	260	H	134	M	D49	113	223														
MAY 01	14:15	16.5	260	H	122		D49	117	219														
MAY 01	14:20	16.5	260	H	110	M	D49	121	219														
MAY 01	14:30	16.5	260	H	91.4	M	D49	124	226														
MAY 01	14:35	16.5	260	H	61.0	M	D49	119	226														
MAY 02	10:00	12.8	229	H	58.5		DH59	176	240														
MAY 03	05:30	26.7	212	H	58.5		DH59	162	232														
MAY 04	05:15	21.1	212	H	58.5		DH59	135	217														
MAY 04	16:00	16.5	212	H	58.5		D49	136	229														
MAY 05	05:45	14.5	200	H	58.5		D49	122	224														
MAY 06	08:30	13.5	207	H	58.5		D49	110	232														
MAY 07	06:00	11.5	238	H	58.5		D49	121	234														
MAY 08	05:45	13.0	303	H	58.5		D49	130	232														
MAY 09	01:00	12.0	399	H	58.5		D49	330	213														
MAY 09	16:00	16.0	399	H	58.5		D49	396	220														
MAY 10	06:00	14.0	445	H	58.5		D49	597	209														
MAY 10	16:00	15.5	445	H	58.5		D49	721	190														
MAY 11	05:45	14.5	445	H	58.5		D49	820	190														
MAY 11	16:15	16.5	445	H	58.5		D49	840	184														
MAY 12	05:45	15.0	456	H	58.5		D49	703	181														
MAY 12	16:00	16.5	456	H	122		D49	669	180	18	26	42	62	76	85	92	99	100			15	59	26
MAY 13	07:00	15.5	442	H	58.5		D49	599	182														
MAY 13	17:15	16.5	442	H	58.5		D49	563	174														
MAY 14	05:30	13.5	413	H	58.5		D49	664	174														
MAY 14	17:00	15.0	413	H	58.5		D49	693	175														
MAY 15	09:00	13.0	453	H	58.5		DH59	568	179														
MAY 15	10:15	15.0	453	H	58.5		DH59	580	174														

NOTE :

DISCHARGE SYMBOL(S): H - DAILY MEAN
VERTICAL SYMBOL(S): M - A SEDIMENT MEASUREMENT VERTICAL

(CONTINUED)

SOUTH SASKATCHEWAN RIVER AT HIGHWAY NO. 41

STATION NO. 05AK001

(CONTINUED)

INSTANTANEOUS SUSPENDED SEDIMENT FOR 1971

DATE	TIME	WATER TEMP. (C)	INSTANT. DISCHARGE (M3/S)		SINGLE SAMPLING VERTICAL (M)		TYPE OF SAMPLER	INSTANT. CONCENT. (MG/L)	DISSOLVED SOLIDS (MG/L)	PERCENT FINER THAN INDICATED SIZE, IN MILLIMETRES .002	.004	.008	.016	.031	.062	.125	.250	.500	1.00	2.00	PERCENT SAND	SILT	CLAY
MAY 16	14:15	15.5	532	H	58.5		DH59	818	179														
MAY 16	17:30	15.5	532	H	58.5		DH59	1370	178														
MAY 17	05:45	14.0	566	H	58.5		DH59	1020	161														
MAY 17	18:00	15.0	566	H	58.5		DH59	1010	173														
MAY 18	07:45	13.5	544	H	58.5		DH59	997	165														
MAY 18	12:20	15.0	120		61.0	M	D49	882	178	14	22	35	52	70	84	91	97	99	100		16	62	22
MAY 18	12:25	15.0	110		91.4	M	D49	912	192	11	18	31	50	67	81	88	96	99	100		19	63	18
MAY 18	12:30	15.0	112		116	M	D49	964	172	09	16	29	47	63	79	87	95	99	100		21	63	16
MAY 18	12:35	15.0	544	H	122		D49	926	173	14	19	34	50	67	83	91	98	100			17	64	19
MAY 18	12:40	15.0	117		140	M	D49	840	189	14	25	38	59	76	91	97	99	100			9	66	25
MAY 18	12:45	15.0	92.1		171	M	D49	781	189	17	28	43	61	78	93	99	100				7	65	28
MAY 18	13:40	15.0	544	H	58.5		DH59	976	175														
MAY 18	16:30	15.0	544	H	58.5		DH59	795	156														
MAY 19	05:45	13.5	493	H	58.5		DH59	893	169														
MAY 19	16:15	15.0	493	H	58.5		DH59	685	175														
MAY 20	06:00	14.0	447	H	58.5		DH59	536	177														
MAY 20	15:30	15.5	447	H	58.5		DH59	420	178														
MAY 21	06:00	14.0	442	H	58.5		DH59	401	183														
MAY 21	17:00	16.0	442	H	58.5		DH59	336	178														
MAY 22	06:30	13.5	399	H	58.5		DH59	337	185														
MAY 22	16:00	16.0	399	H	58.5		DH59	318	188														
MAY 23	08:30	14.5	365	H	58.5		DH59	236	184														
MAY 24	05:15	14.0	360	H	58.5		DH59	206	188														
MAY 25	04:45	14.5	374	H	58.5		DH59	195	188														
MAY 26	04:30	13.5	399	H	58.5		DH59	214	168														
MAY 27	05:00	14.0	425	H	58.5		DH59	248	157														
MAY 27	09:15	18.5	425	H	122		D49	244	168														
MAY 27	09:40	19.5	425	H	58.5		DH59	260	168														
MAY 28	06:45	13.5	507	H	58.5		DH59	357	174														
MAY 28	16:30	17.0	507	H	58.5		DH59	332	181														
MAY 29	05:00	16.5	620	H	58.5		DH59	473	175														
MAY 29	17:00	18.5	620	H	58.5		DH59	635	180														
MAY 30	09:30	16.0	691	H	58.5		DH59	777	180														
MAY 30	18:00	16.5	691	H	58.5		DH59	830	177														
MAY 31	05:00	15.0	765	H	122		D49	1190	166	9	13	20	33	46	61	71	87	98	100		39	48	13
MAY 31	13:00	15.0	765	H	58.5		DH59	1140	157														
JUN 01	04:45	14.0	799	H	58.5		DH59	1330	153														
JUN 01	17:00	16.0	799	H	58.5		DH59	1310	152														
JUN 02	05:00	13.5	830	H	58.5		DH59	1260	159														
JUN 02	13:15	15.0	830	H	58.5		DH59	1100	170														
JUN 02	17:30	15.5	830	H	58.5		DH59	1120	175														

NOTE :

DISCHARGE SYMBOL(S): H - DAILY MEAN
VERTICAL SYMBOL(S): M - A SEDIMENT MEASUREMENT VERTICAL

(CONTINUED)

SOUTH SASKATCHEWAN RIVER AT HIGHWAY NO. 41

STATION NO. 05AK001

INSTANTANEOUS SUSPENDED SEDIMENT FOR 1971

(CONTINUED)

DATE	TIME	WATER TEMP. (C)	INSTANT. DISCHARGE (M3/S)		SINGLE SAMPLING VERTICAL (M)		TYPE OF SAMPLER	INSTANT. CONCENT. (MG/L)	DISSOLVED SOLIDS (MG/L)	PERCENT FINER THAN INDICATED SIZE, IN MILLIMETRES .002	.004	.008	.016	.031	.062	.125	.250	.500	1.00	2.00	PERCENT SAND	SILT	CLAY
JUN 03	05:45	13.5	886	H	58.5		DH59	1200	168														
JUN 03	14:15	15.0	886	H	58.5		DH59	1220	159														
JUN 03	16:15	16.0	886	H	58.5		DH59	1290	164														
JUN 04	05:00	14.5	852	H	58.5		DH59	1660	162														
JUN 04	12:15	15.5	852	H	122		D49	1330	166	12	17	30	46	64	79	87	93	97	99	100	21	62	17
JUN 04	17:00	16.0	852	H	58.5		DH59	1110	169														
JUN 05	04:30	15.0	801	H	58.5		DH59	909	186														
JUN 05	11:45	16.0	801	H	58.5		DH59	922	169														
JUN 05	17:30	16.5	801	H	58.5		DH59	815	168														
JUN 06	08:30	15.5	779	H	58.5		DH59	744	159														
JUN 06	13:00	16.0	779	H	58.5		DH59	729	160														
JUN 06	18:00	16.0	779	H	58.5		DH59	725	165														
JUN 07	06:00	14.5	796	H	58.5		DH59	839	161														
JUN 07	12:15	15.5	796	H	58.5		DH59	648	166														
JUN 07	17:45	16.0	796	H	58.5		DH59	639	161														
JUN 08	04:30	15.0	906	H	58.5		DH59	655	143														
JUN 09	14:30	15.0	195		171	M	P61	1340	174	09	15	24	37	57	84	97	99	100			16	69	15
JUN 09	15:20	15.0	218		140	M	P61	1640	186	07	11	18	29	44	69	89	97	99	100		31	58	11
JUN 09	15:30	15.0	248		61.0	M	P61	1800	187	05	10	16	26	38	61	85	98	100			39	51	10
JUN 09	16:05	15.0	234		116	M	P61	1450	170	08	12	20	33	51	78	95	99	100			22	66	12
JUN 09	16:20	15.0	243		91.4	M	P61	1720	176	09	13	20	31	45	66	79	88	92	94	100	34	53	13
JUN 09	17:30	16.0	1120	H	58.5		DH59	802	172														
JUN 09	05:30	15.0	1120	H	58.5		DH59	1400	169														
JUN 09	09:35	15.0	1120	H	58.5		DH59	1320	161														
JUN 09	11:30	15.5	1120	H	58.5		DH59	1350	172														
JUN 09	15:30	15.0	1120	H	58.5		DH59	1410	182														
JUN 09	17:25	15.0	1120	H	61.0	M	P61	1800	187														
JUN 09	16:45	15.0	1120	H	91.4	M	P61	3160	176														
JUN 09	16:05	15.0	1120	H	116	M	P61	1450	170														
JUN 09	15:20	15.0	1120	H	140	M	P61	1640	186														
JUN 09	14:30	15.0	1120	H	171	M	P61	1340	174														
JUN 09	19:45		1120	H	58.5		DH59	1480	180														
JUN 10	05:30	14.5	1200	H	58.5		DH59	1630	179														
JUN 10	11:45	16.5	1200	H	58.5		DH59	1510	176														
JUN 10	15:15	16.5	1200	H	58.5		DH59	1400	176														
JUN 10	19:00	16.5	1200	H	58.5		DH59	1380	178														
JUN 11	04:45	15.0	1150	H	58.5		DH59	1900	171														
JUN 11	10:15	16.0	1150	H	58.5		DH59	1240	175														
JUN 11	18:00	17.0	1150	H	58.5		DH59	1150	170														

NOTE :

DISCHARGE SYMBOL(S): H - DAILY MEAN
VERTICAL SYMBOL(S): M - A SEDIMENT MEASUREMENT VERTICAL

(CONTINUED)

SOUTH SASKATCHEWAN RIVER AT HIGHWAY NO. 41

STATION NO. 05AK001

INSTANTANEOUS SUSPENDED SEDIMENT FOR 1971

(CONTINUED)

DATE	TIME	WATER TEMP. (C)	INSTANT. DISCHARGE (M3/S)		SINGLE SAMPLING VERTICAL (M)	TYPE OF SAMPLER	INSTANT. CONCENT. (MG/L)	DISSOLVED SOLIDS (MG/L)	PERCENT FINER THAN INDICATED SIZE, IN MILLIMETRES .002	.004	.008	.016	.031	.062	.125	.250	.500	1.00	2.00	PERCENT SAND	SILT	CLAY
JUN 12	05:45	16.0	1090	H	58.5	DH59	977	175														
JUN 12	12:15	17.0	1090	H	58.5	DH59	903	165														
JUN 12	16:30	18.0	1090	H	58.5	DH59	833	159														
JUN 13	20:30	17.0	949	H	58.5	DH59	729	164														
JUN 13	11:30	17.0	949	H	58.5	DH59	739	157														
JUN 13	16:30	17.0	949	H	58.5	DH59	696	170														
JUN 14	05:15	16.0	858	H	58.5	DH59	638	163														
JUN 14	12:30	16.5	858	H	58.5	DH59	566	170														
JUN 14	17:00	16.5	858	H	58.5	DH59	584	167														
JUN 15	07:15	15.5	767	H	58.5	DH59	594	153														
JUN 15	16:30	17.0	767	H	58.5	DH59	553	175														
JUN 16	06:15	15.0	719	H	58.5	DH59	474	160														
JUN 16	16:45	16.0	719	H	58.5	DH59	612	166														
JUN 17	05:00	14.5	663	H	58.5	DH59	479	163														
JUN 17	17:00	16.0	663	H	58.5	DH59	469	168														
JUN 18	05:15	15.0	580	H	58.5	DH59	385	154														
JUN 18	17:00	16.0	580	H	58.5	DH59	296	160														
JUN 19	07:30	16.0	580	H	58.5	DH59	306	160														
JUN 19	15:00	16.0	580	H	58.5	DH59	310	155														
JUN 20	09:30	16.5	535	H	58.5	DH59	236	162														
JUN 20	16:30	18.5	535	H	58.5	DH59	233	158														
JUN 21	06:30	17.0	493	H	58.5	DH59	240	184														
JUN 22	14:00	21.0	396	H	58.5	DH59	152	172														
JUN 23	08:00	20.0	382	H	58.5	DH59	158	173														
JUN 24	09:30	19.0	388	H	58.5	DH59	154	169														
JUN 24	11:45	20.5	388	H	58.5	DH59	133	176														
JUN 25	05:30	20.5	365	H	58.5	DH59	140	181														
JUN 26	06:15	18.0	351	H	58.5	DH59	115	182														
JUN 27	10:00	18.0	402	H	58.5	DH59	160	172														
JUN 28	04:30	16.5	430	H	58.5	DH59	190	174														
JUN 29	05:15	17.0	411	H	58.5	DH59	153	169														
JUN 30	13:15	18.0	416	H	58.5	DH59	121	177														
JUL 01	05:30	17.0	402	H	58.5	DH59	118	180														
JUL 02	05:00	18.5	368	H	58.5	DH59	113	173														
JUL 03	05:30	17.0	331	H	58.5	DH59	150	170														
JUL 04	09:00	16.5	282	H	58.5	DH59	135	168														
JUL 05	05:00	17.0	255	H	58.5	DH59	72	173														
JUL 06	05:30	17.0	237	H	58.5	DH59	57	183														
JUL 07	05:30	15.0	233	H	58.5	DH59	47	180														
JUL 08	05:45	15.5	237	H	58.5	DH59	58	181														
JUL 09	05:00	16.0	232	H	58.5	DH59	38	190														

NOTE :

DISCHARGE SYMBOL(S): H - DAILY MEAN

(CONTINUED)

SOUTH SASKATCHEWAN RIVER AT HIGHWAY NO. 41

STATION NO. 05AK001

INSTANTANEOUS SUSPENDED SEDIMENT FOR 1971

(CONTINUED)

DATE	TIME	WATER TEMP. (C)	INSTANT. DISCHARGE (M3/S)		SINGLE SAMPLING VERTICAL (M)		TYPE OF SAMPLER	INSTANT. CONCENT. (MG/L)	DISSOLVED SOLIDS (MG/L)	PERCENT FINER THAN INDICATED SIZE, IN MILLIMETRES .002	.004	.008	.016	.031	.062	.125	.250	.500	1.00	2.00	PERCENT SAND	SILT	CLAY
JUL 10	04:45	15.5	222	H	58.5		DH59	37	192														
JUL 11	09:00	16.0	206	H	58.5		DH59	37	187														
JUL 12	05:00	15.5	187	H	58.5		DH59	26	181														
JUL 13	04:45	16.5	180	H	58.5		DH59	28	191														
JUL 14	05:15	17.0	179	H	58.5		DH59	26	187														
JUL 15	04:45	19.0	199	H	58.5		DH59	34	195														
JUL 16	05:00	20.5	198	H	58.5		DH59	31	190														
JUL 17	05:45	21.5	189	H	58.5		DH59	27	195														
JUL 18	20:00	23.0	182	H	58.5		DH59	25	195														
JUL 19	04:30	21.0	183	H	58.5		DH59	22	183														
JUL 20	06:00	22.0	167	H	58.5		DH39	22	185														
JUL 21	04:45	23.5	153	H	58.5		DH59	27	187														
JUL 22	08:30	21.5	164	H	58.5		DH59	17	188														
JUL 22	12:00	24.5	164	H	WERB		DH48	9	199														
JUL 22	12:10	24.5	164	H	73.2	M	D49	17	183														
JUL 22	12:15	24.5	164	H	97.5	M	D49	19	184														
JUL 22	12:25	24.5	164	H	122	M	D49	16	186														
JUL 22	12:30	24.5	164	H	134	M	D49	15	198														
JUL 22	12:40	24.5	164	H	158	M	D49	17	176														
JUL 22	12:45	24.5	164	H	58.5		DH59	16	173														
JUL 23	05:00	24.0	181	H	58.5		DH59	21	190														
JUL 24	05:30	21.0	207	H	58.5		DH59	24	189														
JUL 25	17:30	20.5	206	H	58.5		DH59	31	191														
JUL 26	04:45	20.0	184	H	58.5		DH59	26	183														
JUL 27	05:30	20.5	210	H	58.5		DH59	20	191														
JUL 28	05:00	20.0	210	H	58.5		DH59	214	186														
JUL 29	06:30	20.5	231	H	58.5		DH59	23	186														
JUL 30	05:15	20.0	212	H	58.5		DH59	16	189														
JUL 31	05:45	21.5	179	H	58.5		DH59	16	198														
AUG 01	18:30	23.0	187	H	58.5		DH59	10	195														
AUG 02	05:45	21.0	172	H	58.5		DH59	9	194														
AUG 03	04:45	23.0	172	H	58.5		DH59	9	189														
AUG 04	05:45	23.5	183	H	58.5		DH59	12	185														
AUG 05	05:15	23.0	164	H	58.5		DH59	8	185														
AUG 06	05:30	24.5	168	H	58.5		DH59	8	193														
AUG 07	05:00	23.0	159	H	58.5		DH59	6	186														
AUG 08	05:30	27.0	150	H	58.5		DH59	3	202														
AUG 09	05:00	24.5	140	H	58.5		DH59	5	200														
AUG 10	05:15	23.0	134	H	58.5		DH59	14	187														
AUG 11	05:30	22.0	142	H	58.5		DH59	18	199														
AUG 12	05:45	22.0	134	H	58.5		DH59	14	185														

NOTE :

DISCHARGE SYMBOL(S): H - DAILY MEAN
VERTICAL SYMBOL(S): M - A SEDIMENT MEASUREMENT VERTICAL

(CONTINUED)

SOUTH SASKATCHEWAN RIVER AT HIGHWAY NO. 41

STATION NO. 05AK001

INSTANTANEOUS SUSPENDED SEDIMENT FOR 1971

(CONTINUED)

DATE	TIME	WATER TEMP. (C)	INSTANT. DISCHARGE (M3/S)		SINGLE SAMPLING VERTICAL (M)		TYPE OF SAMPLER	INSTANT. CONCENT. (MG/L)	DISSOLVED SOLIDS (MG/L)	PERCENT FINER THAN INDICATED SIZE, IN MILLIMETRES .002	.004	.008	.016	.031	.062	.125	.250	.500	1.00	2.00	PERCENT SAND	SILT	CLAY
AUG 13	06:15	20.0	119	H	58.5		DH59	18	192														
AUG 14	06:00	19.0	116	H	58.5		DH59	15	193														
AUG 15	18:00	24.0	119	H	58.5		DH59	11	196														
AUG 17	05:00	20.5	156	H	58.5		DH59	21	188														
AUG 17	14:00		156	H	58.5		DH59	20	194														
AUG 19	05:15	20.0	108	H	58.5		DH59	14	183														
AUG 21	05:15	21.0	94.3	H	58.5		DH59	13	187														
AUG 23	13:30	18.0	95.4	H	58.5		DH59	18	191														
AUG 25	05:15	16.0	88.3	H	58.5		DH59	21	193														
AUG 25	14:30	22.0	88.3	H	WERB		DH48	13	216														
AUG 25	14:35	22.0	88.3	H	73.2	M	DH59	11	200														
AUG 25	14:39	22.0	88.3	H	97.5	M	DH59	11	197														
AUG 25	14:40	22.0	88.3	H	122	M	DH59	10	195														
AUG 25	14:45	22.0	88.3	H	134	M	DH59	9	198														
AUG 25	14:50	22.0	88.3	H	158	M	DH59	6	199														
AUG 25	15:55	22.0	88.3	H	58.5		DH59	10	201														
AUG 27	05:45	20.5	71.4	H	58.5		DH59	12	202														
AUG 29	13:30	23.0	64.3	H	58.5		DH59	5	211														
AUG 31	12:30	21.0	88.6	H	58.5		DH59	8	217														
AUG 31	14:45	21.5	88.6	H	58.5		DH59	8	221														
AUG 31	13:00	23.5	88.6	H	122		D49	7	220														
SEP 02	06:30	17.0	86.7	H	58.5		D49	9	225														
SEP 04	05:30	16.5	73.1	H	58.5		D49	4	211														
SEP 05	18:00	20.0	68.0	H	58.5		D49	2	216														
SEP 07	06:15	16.0	74.2	H	58.5		D49	5	211														
SEP 09	06:45	15.5	64.8	H	58.5		D49	4	230														
SEP 09	13:04	16.5	64.8	H	122		D49	2	213														
SEP 11	05:45	16.0	50.4	H	58.5		D49	2	215														
SEP 12	18:45	16.5	51.0	H	58.5		D49	[illegible]	230														
SEP 14	06:00	12.0	46.4	H	58.5		D49	[illegible]	240														
SEP 16	06:00	9.5	48.4	H	58.5		D49	[illegible]	246														
SEP 18	06:30	9.0	56.1	H	58.5		D49	3	254														
SEP 19	14:30	11.0	66.4	H	58.5		D49	9	255														
SEP 21	06:45	8.0	53.5	H	58.5		D49	118	252														
SEP 23	06:30	9.5	48.4	H	58.5		D49	8	257														
SEP 25	06:30	10.5	45.9	H	58.5		D49	[illegible]	374														
SEP 26	13:30	11.5	47.0	H	58.5		D49	3	347														
SEP 28	07:15	10.0	49.8	H	58.5		D49	5	334														

NOTE :

DISCHARGE SYMBOL(S): H - DAILY MEAN
VERTICAL SYMBOL(S): M - A SEDIMENT MEASUREMENT VERTICAL

(CONTINUED)

SOUTH SASKATCHEWAN RIVER AT HIGHWAY NO. 41

STATION NO. 05AK001

INSTANTANEOUS SUSPENDED SEDIMENT FOR 1971

(CONTINUED)

DATE	TIME	WATER TEMP. (C)	INSTANT. DISCHARGE (M3/S)		SINGLE SAMPLING VERTICAL (M)		TYPE OF SAMPLER	INSTANT. CONCENT. (MG/L)	DISSOLVED SOLIDS (MG/L)	PERCENT FINER THAN INDICATED SIZE, IN MILLIMETRES .002	.004	.008	.016	.031	.062	.125	.250	.500	1.00	2.00	PERCENT SAND	SILT	CLAY
SEP 30	07:30	9.0	46.7	H	58.5		D49	6	332														
SEP 30	12:30	10.0	46.7	H	79.2	M	D49	2	313														
SEP 30	12:45	10.0	46.7	H	104	M	D49	2	305														
SEP 30	13:00	10.0	46.7	H	122	M	D49	2	265														
SEP 30	13:15	10.0	46.7	H	134	M	D49	2	260														
SEP 30	13:30	10.0	46.7	H	158	M	D49	1	267														
SEP 30	16:00	10.0	46.7	H	58.5		D49	1	265														
OCT 02	10:00	10.5	43.9	H	58.5		D49	8	258														
OCT 03	17:30	11.5	72.8	H	58.5		D49	6	269														
OCT 05	07:30	10.5	49.8	H	58.5		D49	6	272														
OCT 07	07:30	11.0	46.2	H	58.5		D49	16	275														
OCT 09	07:30	9.5	45.9	H	58.5		D49	6	271														
OCT 10	08:30	9.0	45.3	H	58.5		D49	5	270														
OCT 12	15:30	12.0	43.0	H	58.5		D49	6	282														
OCT 14	08:00	7.0	46.7	H	58.5		D49	8	284														
OCT 16	10:00	5.0	51.3	H	58.5		D49	8	300														
OCT 17	14:30	6.5	53.8	H	58.5		D49	6	295														
OCT 19	07:45	4.0	56.6	H	58.5		D49	8	286														
OCT 21	07:15	5.0	77.3	H	58.5		D49	19	287														
OCT 23	09:15	6.0	86.1	H	58.5		D49	22	262														
OCT 24	14:30	7.0	77.3	H	58.5		D49	15	253														
OCT 26	08:15	5.5	113	H	58.5		D49	19	255														
OCT 27	15:00	0.5	127	H	73.2	M	D49	29	249														
OCT 27	15:10	0.5	127	H	104	M	D49	38	246														
OCT 27	15:20	0.5	127	H	122	M	D49	32	248														
OCT 27	15:30	0.5	127	H	134	M	D49	38	249														
OCT 27	15:40	0.5	127	H	158	M	D49	24	239														

NOTE :

DISCHARGE SYMBOL(S): H - DAILY MEAN
VERTICAL SYMBOL(S): M - A SEDIMENT MEASUREMENT VERTICAL

SOUTH SASKATCHEWAN RIVER AT HIGHWAY NO. 41

STATION NO. 05AK001

INSTANTANEOUS SUSPENDED SEDIMENT FOR 1972

DATE	TIME	WATER TEMP. (C)	INSTANT. DISCHARGE (M3/S)		SINGLE SAMPLING VERTICAL (M)		TYPE OF SAMPLER	INSTANT. CONCENT. (MG/L)	DISSOLVED SOLIDS (MG/L)	PERCENT FINER THAN INDICATED SIZE, IN MILLIMETRES .002	.004	.008	.016	.031	.062	.125	.250	.500	1.00	2.00	PERCENT SAND	SILT	CLAY
MAR 23	08:30	3.5	517		122		DH59	1150	222	19	24	36	48	58	68	83	94	99	100		32	44	24
MAR 23	08:35	3.5	517		122		DH59	1270	210	19	24	33	46	55	65	77	94	99	100		35	41	24
APR 13	09:45	6.5	274		122		DH59	753	239	30	36	61	84	90	91	93	97	99	99	100	9	55	36
MAY 19	05:30	16.0	713		122		DH59	2250	181	10	17	27	42	62	80	90	94	96	97	100	20	63	17
MAY 26	20:15		819		122		DH59	1380	160	15	22	32	45	60	78	94	99	100			22	56	22
MAY 30	11:15		801		122		DH59	974	191	16	24	36	50	65	79	90	96	99	100		21	55	24
MAY 31	12:30	17.0	782	V	61.0	M	DH59	761	177	12	17	30	45	58	74	78	96	99	100		26	57	17
MAY 31	12:35	17.0	782	V	91.0	M	DH59	1030	178	9	12	21	30	42	54	74	93	98	99	100	46	42	12
MAY 31	12:40	17.0	782	V	116	M	DH59	815	197	15	30	32	45	57	71	87	95	97	98	100	29	41	30
MAY 31	12:45	17.0	776		122		DH59	814	183	13	18	31	48	62	75	92	99	100			25	57	18
MAY 31	12:50	17.0	782	V	134	M	DH59	693	176	14	17	31	48	64	79	94	98	99	99	100	21	62	17
MAY 31	12:55	17.0	782	V	158	M	DH59	671	183	10	13	27	48	64	82	97	99	100			18	69	13
JUN 03	10:00	20.0	1070		122		DH59	1970	177	8	15	24	36	54	77	93	98	99	99	100	23	62	15
JUN 05	11:30	20.0	1250		122		DH59	2260	167	15	23	34	48	64	81	95	99	100			19	58	23
JUN 09	16:00	17.0	1030		122		DH59	932	149	13	18	30	47	65	81	95	99	100			19	63	18
JUN 15	14:00	17.0	1110	H	55.0	M	DH59	1120	151	12	20	30	49	56	70	81	91	95	97	100	30	50	20
JUN 15	14:05	17.0	1110	H	85.0	M	DH59	1130	150	11	16	28	40	52	66	81	92	95	98	100	34	50	16
JUN 15	14:10	17.0	1110	H	116	M	DH59	975	151	13	21	32	48	62	77	93	99	100			23	56	21
JUN 15	14:15	17.0	1110	H	146	M	DH59	920	152	16	25	35	51	67	82	96	99	100			18	57	25
JUN 15	14:20	17.0	1110	H	177	M	DH59	885	154	19	28	40	58	73	88	98	100				12	60	28
JUN 20	16:15	0.0	697		122		DH59	595	166	10	12	25	37	49	65	85	94	98	99	100	35	53	12
JUN 25	18:30	16.0	604		122		DH59	577	174	12	14	21	32	45	61	78	90	95	98	100	39	47	14

NOTE :

DISCHARGE SYMBOL(S): H - DAILY MEAN V - DAILY MEAN; MANUAL GAUGE
VERTICAL SYMBOL(S): M - A SEDIMENT MEASUREMENT VERTICAL

SOUTH SASKATCHEWAN RIVER AT HIGHWAY NO. 41

STATION NO. 05AK001

INSTANTANEOUS SUSPENDED SEDIMENT FOR 1973

DATE	TIME	WATER TEMP. (C)	INSTANT. DISCHARGE (M3/S)	SINGLE SAMPLING VERTICAL (M)	TYPE OF SAMPLER	INSTANT. CONCENT. (MG/L)	DISSOLVED SOLIDS (MG/L)	PERCENT FINER THAN INDICATED SIZE, IN MILLIMETRES .002	.004	.008	.016	.031	.062	.125	.250	.500	1.00	2.00	PERCENT SAND	SILT	CLAY
MAY 23	06:00	14.0	445	122	DH59	481	210	18	24	42	68	87	92	94	97	99	100		8	68	24
JUN 01	07:00	13.0	503	122	DH59	496	219	14	17	27	44	63	75	82	87	92	94	100	25	58	17
JUN 12	07:30	14.0	435	122	DH59	332	209	13	20	32	46	59	73	83	91	95	97	100	27	53	20
JUN 20	05:45	14.0	498	122	DH59	957	226	26	35	46	56	67	76	81	88	95	98	100	24	41	35

SOUTH SASKATCHEWAN RIVER AT HIGHWAY NO. 41

STATION NO. 05AK001

INSTANTANEOUS SUSPENDED SEDIMENT FOR 1974

DATE	TIME	WATER TEMP. (C)	INSTANT. DISCHARGE (M3/S)		SINGLE SAMPLING VERTICAL (M)		TYPE OF SAMPLER	INSTANT. CONCENT. (MG/L)	DISSOLVED SOLIDS (MG/L)	PERCENT FINER THAN INDICATED SIZE, IN MILLIMETRES .002	.004	.008	.016	.031	.062	.125	.250	.500	1.00	2.00	PERCENT SAND	SILT	CLAY
MAY 14	12:00	11.1	515	H	67.0	M	DH59	682	212	19	24	38	53	67	79	91	98	100			21	55	24
MAY 14	12:15	11.1	515	H	91.0	M	DH59	758	191	15	22	35	48	61	72	82	95	99	100		28	50	22
MAY 14	12:30	11.1	515	H	116	M	DH59	716	178	17	21	36	48	61	73	87	96	99	100		27	52	21
MAY 14	12:45	11.1	515	H	140	M	DH59	638	207	17	26	40	56	70	82	95	99	100			18	56	26
MAY 14	13:00	11.1	515	H	165	M	DH59	613	193	21	28	43	58	74	87	98	100				13	59	28
JUN 21	11:30	16.0	1230	H	64.0	M	DH59	2190	171	12	16	25	38	49	65	83	97	100			35	49	16
JUN 21	11:35	16.0	1230	H	91.0	M	DH59	1980	171	13	17	25	37	52	69	84	93	98	99	100	31	52	17
JUN 21	11:40	16.0	1230	H	116	M	DH59	1660	184	18	20	30	45	62	81	96	100				19	61	20
JUN 21	11:45	16.0	1230	H	140	M	DH59	1760	190	17	20	33	50	62	81	94	99	100			19	61	20
JUN 21	11:50	16.0	1230	H	171	M	DH59	1630	181	16	20	31	47	61	80	95	99	100			20	60	20
JUN 21	12:50	16.0	1240		122		DH59	1750	178	16	20	30	44	60	77	91	98	100			23	57	20

NOTE :

DISCHARGE SYMBOL(S): H - DAILY MEAN
VERTICAL SYMBOL(S): M - A SEDIMENT MEASUREMENT VERTICAL

SOUTH SASKATCHEWAN RIVER AT HIGHWAY NO. 41

STATION NO. 05AK001

INSTANTANEOUS SUSPENDED SEDIMENT FOR 1975

DATE	TIME	WATER TEMP. (C)	INSTANT. DISCHARGE (M3/S)		SINGLE SAMPLING VERTICAL (M)		TYPE OF SAMPLER	INSTANT. CONCENT. (MG/L)	DISSOLVED SOLIDS (MG/L)	PERCENT FINER THAN INDICATED SIZE, IN MILLIMETRES .002	.004	.008	.016	.031	.062	.125	.250	.500	1.00	2.00	PERCENT SAND	SILT	CLAY
JUN 10	15:00	15.6	773		122		DH59	1210	158	9	15	24	36	50	70	86	94	97	98	100	30	55	15
JUN 22	19:00	14.4	1780		122		DH59	4600	215	9	16	30	47	64	85	93	98	99	100		15	69	16
JUN 23	06:45	14.4	2460		122		DH59	7260	243	23	30	46	65	79	92	97	99	100			8	62	30
JUN 23	11:45	14.4	2860		122		DH59	13000	240	15	21	35	52	71	88	95	98	99	100		12	67	21
JUN 23	16:20	14.4	2960		122		DH59	7410	219	8	15	44	65	81	94	98	99	100			6	79	15
JUN 25	14:30	17.2	1850	H	64.0	M	DH59	3030	180	22	29	45	65	76	86	92	98	99	100		14	57	29
JUN 25	14:35	17.2	1850	H	91.0	M	DH59	2870	170	22	27	49	69	81	92	98	99	100			8	65	27
JUN 25	14:38	17.2	1850	H	119	M	DH59	2800	185	25	30	49	69	82	93	98	100				7	63	30
JUN 25	14:40	17.2	1850	H	146	M	DH59	2770	190	22	31	49	69	81	93	99	100				7	62	31
JUN 25	14:45	17.2	1850	H	174	M	DH59	2760	183	25	33	52	72	84	96	99	100				4	63	33
JUN 25	15:30	17.2	1760		122		DH59	2750	193	20	31	49	69	82	94	98	99	100			6	63	31

NOTE :

DISCHARGE SYMBOL(S): H - DAILY MEAN
VERTICAL SYMBOL(S): M - A SEDIMENT MEASUREMENT VERTICAL

SOUTH SASKATCHEWAN RIVER AT HIGHWAY NO. 41

STATION NO. 05AK001

INSTANTANEOUS SUSPENDED SEDIMENT FOR 1976

DATE	TIME	WATER TEMP. (C)	INSTANT. DISCHARGE (M3/S)	SINGLE SAMPLING VERTICAL (M)	TYPE OF SAMPLER	INSTANT. CONCENT. (MG/L)	DISSOLVED SOLIDS (MG/L)	PERCENT FINER THAN INDICATED SIZE, IN MILLIMETRES .002	.004	.008	.016	.031	.062	.125	.250	.500	1.00	2.00	PERCENT SAND	SILT	CLAY
MAY 18	13:05	13.0	589	122	DH59	969	178	14	18	27	41	56	70	80	87	92	94	100	30	52	18
MAY 25	06:30	14.0	403	122	DH59	776	180	14	16	24	33	40	44	49	59	78	92	100	56	28	16
AUG 18	06:30	17.0	410	122	DH59	1020	190	32	42	58	76	86	91	93	96	99	100		9	49	42

NOTE :

TIME SYMBOL: E - ESTIMATED

SOUTH SASKATCHEWAN RIVER AT HIGHWAY NO. 41 STATION NO. 05AK001

INSTANTANEOUS SUSPENDED SEDIMENT FOR 1977

DATE	TIME	WATER TEMP. (C)	INSTANT. DISCHARGE (M3/S)		SINGLE SAMPLING VERTICAL (M)		TYPE OF SAMPLER	INSTANT. CONCENT. (MG/L)	DISSOLVED SOLIDS (MG/L)	PERCENT FINER THAN INDICATED SIZE, IN MILLIMETRES .002	.004	.008	.016	.031	.062	.125	.250	.500	1.00	2.00	PERCENT SAND	SILT	CLAY
JAN 05	12:00E		45.3	W	MID	X	DH48	5	279														
JAN 26	11:45		103	W	MID	X	DH48	16	284														
FEB 15	12:00E		92.0	W	MID	X	DH48	13															
MAR 10	12:00E		114	W	MID	X	---	15	230														
MAR 29	15:50	2.0	75.3	W	122		DH59	23	272														
MAR 31	11:30	3.0	66.5	W	122		DH59	33	259														
APR 04	15:00	4.0	71.9	W	122		DH59	22															
APR 06	09:00	8.0	70.8	W	122		DH59	19	253														
APR 08	10:00	7.0	77.3		122		DH59	15															
APR 11	09:45	7.0	111		122		DH59	24	252														
APR 13	06:15	6.0	107		122		DH59	27															
APR 15	06:00	7.0	107		122		DH59	11	259														
APR 17	11:00	8.0	95.0		122		DH59	13															
APR 19	06:00	7.0	76.0		122		DH59	11	299														
APR 21	06:15	7.0	75.6		122		DH59	8															
APR 23	05:45	8.0	63.1		122		DH59	6															
APR 24	11:30	15.0	62.3		122		DH59	6	241														
APR 27	07:45	13.0	40.5		122		DH59	10															
APR 28	14:30	16.0	35.6		122		DH59	4	234														
APR 29	06:45	15.0	28.2		122		DH59	3															
APR 30	08:00	14.0	21.2		122		DH59	3	239														
MAY 03	07:30	13.0	16.1		122		DH59	3															
MAY 05	09:30	12.0	32.4		122		DH59	5	260														
MAY 07	06:15	13.0	35.9		122		DH59	7															
MAY 08	09:30	16.0	43.7		122		DH59	6	263														
MAY 10	07:00	19.0	49.0		122		DH59	6															
MAY 12	07:30	15.0	56.7		122		DH59	17	325														
MAY 14	07:15	16.0	48.3		122		DH59	11															
MAY 15	09:30	15.0	48.3		122		DH59	7	288														
MAY 17	09:00	12.0	80.8		122		DH59	117															
MAY 19	08:00	13.0	74.4		122		DH59	69	308														
MAY 21	06:30	13.0	68.8		122		DH59	84															
MAY 22	09:15	15.0	132		122		DH59	144	294														
MAY 24	07:30	16.0	95.7	Y	122		DH59	68															
MAY 25	13:00		86.5		122		DH59	44	296														
MAY 26	06:45	15.0	78.3		122		DH59	35															
MAY 28	06:30	14.0	65.6		122		DH59	34	254														
MAY 30	09:00	13.0	61.3		122		DH59	31															
JUN 02	07:00	14.0	109		122		DH59	78	259														
JUN 04	06:00	17.0	126	Y	122		DH59	77															
JUN 05	08:00	18.0	112	Y	122		DH59	37	252														

NOTE :

TIME SYMBOL: E - ESTIMATED
DISCHARGE SYMBOL(S): W - DAILY MEAN; ICE CONDITIONS Y - DAILY MEAN; ESTIMATED
VERTICAL SYMBOL(S): X - NOT AT REGULAR SINGLE SAMPLE VERTICAL

(CONTINUED)

SOUTH SASKATCHEWAN RIVER AT HIGHWAY NO. 41

STATION NO. 05AK001

(CONTINUED)

INSTANTANEOUS SUSPENDED SEDIMENT FOR 1977

DATE	TIME	WATER TEMP. (C)	INSTANT. DISCHARGE (M3/S)		SINGLE SAMPLING VERTICAL (M)	TYPE OF SAMPLER	INSTANT. CONCENT. (MG/L)	DISSOLVED SOLIDS (MG/L)	PERCENT FINER THAN INDICATED SIZE, IN MILLIMETRES .002	.004	.008	.016	.031	.062	.125	.250	.500	1.00	2.00	PERCENT SAND	SILT	CLAY
JUN 08	08:30	21.0	42.5	Y	122	DH59	8															
JUN 10	07:30	16.0	80.7	Y	122	DH59	8	232														
JUN 12	10:30	18.0	112	Y	122	DH59	10															
JUN 14	06:00	16.0	92.2		122	DH59	29	243														
JUN 16	10:00	19.0	178		122	DH59	1340	302														
JUN 18	14:00	21.0	121		122	DH59	104	202														
JUN 19	09:00	19.0	95.3		122	DH59	88															
JUN 21	07:00	21.0	108		122	DH59	52	226														
JUN 23	06:00	20.0	102		122	DH59	47															
JUN 25	06:45	23.0	89.8		122	DH59	37	215														
JUN 26	20:00	21.0	107		122	DH59	31															
JUN 28	07:00	19.0	76.7		122	DH59	24	202														
JUN 28	14:00	21.0	57.3		122	DH59	18															
JUN 30	06:30	14.0	51.7		122	DH59	16	202														
JUL 02	06:00	20.0	61.5		122	DH59	15															
JUL 03	08:00	15.0	58.5		122	DH59	13	199														
JUL 05	06:30	18.0	52.0		122	DH59	9															
JUL 07	08:00	16.0	63.4		122	DH59	13	227														
JUL 09	08:00	17.0	47.8		122	DH59	8															
JUL 10	09:30	16.0	45.9		122	DH59	7	234														
JUL 12	07:00	17.0	47.1		122	DH59	10															
JUL 14	07:00	15.0	43.5		122	DH59	13	233														
JUL 16	07:15	18.0	44.5		122	DH59	8															
JUL 17	16:15	19.0	42.6		122	DH59	7	251														
JUL 19	07:00	18.0	39.3		122	DH59	6															
JUL 21	07:00	17.0	53.9		122	DH59	16	270														
JUL 23	06:30	20.0	49.8		122	DH59	9															
JUL 24	16:30	22.0	45.9		122	DH59	10	267														
JUL 26	07:00	18.0	40.7		122	DH59	8															
JUL 26	14:40	22.0	40.1		122	DH59	8	265														
JUL 28	06:30	20.0	46.5		122	DH59	18															
JUL 30	06:30	18.0	41.7		122	DH59	11	245														
JUL 31	19:30	20.0	41.5		122	DH59	10															
AUG 02	06:30	19.0	46.6		122	DH59	15	252														
AUG 04	06:00	18.0	42.9		122	DH59	25															
AUG 06	19:00	19.0	46.2		122	DH59	17	256														
AUG 07	10:30	18.0	42.8		122	DH59	11															
AUG 08	08:30	17.0	50.9		122	DH59	19	250														
AUG 11	06:15	18.0	52.1		122	DH59	19															
AUG 13	07:00	18.0	56.4		122	DH59	85	243														
AUG 14	11:30	17.0	57.2		122	DH59	32															

NOTE :

DISCHARGE SYMBOL(S): Y - DAILY MEAN; ESTIMATED

(CONTINUED)

SOUTH SASKATCHEWAN RIVER AT HIGHWAY NO. 41

STATION NO. 05AK001

(CONTINUED)

INSTANTANEOUS SUSPENDED SEDIMENT FOR 1977

DATE	TIME	WATER TEMP. (C)	INSTANT. DISCHARGE (M3/S)	SINGLE SAMPLING VERTICAL (M)	TYPE OF SAMPLER	INSTANT. CONCENT. (MG/L)	DISSOLVED SOLIDS (MG/L)	PERCENT FINER THAN INDICATED SIZE, IN MILLIMETRES .002	.004	.008	.016	.031	.062	.125	.250	.500	1.00	2.00	PERCENT SAND	SILT	CLAY
AUG 16	06:30	16.0	58.9	122	DH59	37	247														
AUG 18	06:15	17.0	58.3	122	DH59	18															
AUG 20	16:00	18.0	160	122	DH59	97	233														
AUG 21	16:45	16.0	151	122	DH59	78															
AUG 23	07:15	15.0	107	122	DH59	37	221														
AUG 25	07:00	16.0	89.3	122	DH59	30	212														
AUG 27	07:00	15.0	113	122	DH59	28															
AUG 29	11:00	17.0	100	122	DH59	19	214														
AUG 29	14:30	16.0	97.9	122	DH59	26															
AUG 30	08:00	15.0	105	122	DH59	27	218														
SEP 01	08:00	14.0	133	122	DH59	37															
SEP 03	07:30	16.0	95.6	122	DH59	19	213														
SEP 04	10:30	15.0	81.8	122	DH59	15															
SEP 06	07:30	16.0	76.2	122	DH59	27	218														
SEP 08	09:00	14.0	58.8	122	DH59	12															
SEP 10	10:00	15.0	57.5	122	DH59	11	221														
SEP 11	09:30	14.0	50.5	122	DH59	8	217														
SEP 13	08:00	14.0	51.6	122	DH59	7															
SEP 15	09:00	12.0	51.9	122	DH59	8	226														
SEP 17	11:30	12.0	62.2	122	DH59	8															
SEP 18	14:45	15.0	60.4	122	DH59	10	241														
SEP 20	07:30	14.0	43.5	122	DH59	7															
SEP 22	08:30	14.0	77.2	122	DH59	109	239														
SEP 24	08:30	13.0	89.9	122	DH59	35															
SEP 25	10:30	13.0	77.3	122	DH59	26	233														
SEP 26	15:50	9.0	60.6	122	DH59	18															
SEP 27	08:00	8.0	58.2	122	DH59	63	235														
SEP 29	10:30	8.0	69.1	122	DH59	17															
OCT 01	08:00	7.0	77.5	122	DH59	22	262														
OCT 02	10:45		87.8	122	DH59	45															
OCT 04	08:30		61.7	122	DH59	14	267														
OCT 06	08:15		59.2	122	DH59	20															
OCT 08	08:30		66.2	122	DH59	16	265														
OCT 09	13:15		59.8	122	DH59	12															
OCT 11	10:15		70.4	122	DH59	16	280														
OCT 13	08:00		48.1	122	DH59	12															
OCT 15	08:00		54.6	122	DH59	10	266														
OCT 16	10:00		43.1	122	DH59	10															
OCT 18	17:00		46.1	122	DH59	8	279														
OCT 20	14:00		40.9	122	DH59	7															
OCT 22	08:45		98.1	122	DH59	36	296														

(CONTINUED)

SOUTH SASKATCHEWAN RIVER AT HIGHWAY NO. 41

STATION NO. 05AK001

(CONTINUED)

INSTANTANEOUS SUSPENDED SEDIMENT FOR 1977

DATE	TIME	WATER TEMP. (C)	INSTANT. DISCHARGE (M3/S)		SINGLE SAMPLING VERTICAL (M)	TYPE OF SAMPLER	INSTANT. CONCENT. (MG/L)	DISSOLVED SOLIDS (MG/L)	PERCENT FINER THAN INDICATED SIZE, IN MILLIMETRES .002	.004	.008	.016	.031	.062	.125	.250	.500	1.00	2.00	PERCENT SAND	SILT	CLAY
OCT 23	11:45		70.3		122	DH59	16															
OCT 25	13:30		66.2		122	DH59	29	300														
OCT 27	09:00		58.4		122	DH59	18															
OCT 30	08:45		55.0		122	DH59	17	289														
NOV 01	08:30		53.7		122	DH59	15															
NOV 03	13:00		65.7		122	DH59	26	278														
NOV 05	13:45		61.1		122	DH59	21															
NOV 06	11:30		59.8		122	DH59	18	297														
NOV 08	09:00		60.0	W	122	DH59	27	288														
NOV 10	15:30		53.0	W	122	DH59	16	290														
NOV 12	14:30		45.6	W	122	DH59	15	284														
NOV 13	15:00		47.6	W	122	DH59	14	281														
NOV 15	07:45		54.4	W	122	DH59	25	278														
DEC 14	11:30	0.0	48.1	W	122	DH59	8	322														

NOTE :

DISCHARGE SYMBOL(S): W - DAILY MEAN; ICE CONDITIONS

SOUTH SASKATCHEWAN RIVER AT HIGHWAY NO. 41 STATION NO. 05AK001

INSTANTANEOUS SUSPENDED SEDIMENT FOR 1978

DATE	TIME	WATER TEMP. (C)	INSTANT. DISCHARGE (M3/S)		SINGLE SAMPLING VERTICAL (M)		TYPE OF SAMPLER	INSTANT. CONCENT. (MG/L)	DISSOLVED SOLIDS (MG/L)	PERCENT FINER THAN INDICATED SIZE, IN MILLIMETRES .002	.004	.008	.016	.031	.062	.125	.250	.500	1.00	2.00	PERCENT SAND	SILT	CLAY
JAN 24	12:00	0.0	41.9	W	MID	X	DH48	506	295														
FEB 14	12:00	0.0	65.4	W	MID	X	DH48	35	271														
MAR 08	12:00E	0.0	76.7	W	MID	X	DH48	22	283														
APR 04	14:00		285		122		DH59	990	243														
APR 06	10:30		225		122		DH59	448	261														
APR 08	08:45		189		122		DH59	246	269														
APR 09	10:15		179		122		DH59	235	285														
APR 12	08:00		159		122		DH59	241	297														
APR 14	10:15	6.0	137		122		DH59	139	296														
APR 16	08:00	6.0	137		122		DH59	139	300														
APR 18	09:30	7.0	95.3		122		DH59	109	290														
APR 20	06:45	6.0	140		122		DH59	128	300														
APR 22	07:00	8.0	125		122		DH59	94	293														
APR 23	13:30	8.0	139		122		DH59	283	299														
APR 25	07:00	8.0	129		122		DH59	141	318														
APR 27	05:45	11.0	149		122		DH59	208	339														
APR 29	07:00	13.0	135		122		DH59	120	394														
APR 30	11:30	12.0	147		122		DH59	153	382														
MAY 02	06:15	14.0	139		122		DH59	107	352														
MAY 04	06:15	12.0	242		122		DH59	338	354														
MAY 06	06:30	11.0	247		122		DH59	289	282														
MAY 07	11:45	12.0	275		122		DH59	296															
MAY 09	07:00	13.0	257		122		DH59	263	234														
MAY 10	18:00	14.0	255		122		DH59	244															
MAY 11	10:30	13.0	250		122		DH59	250	229														
MAY 13	08:00	12.0	223		122		DH59	216															
MAY 14	09:30	13.0	261		122		DH59	232	243														
MAY 16	08:00	13.0	274		122		DH59	296															
MAY 18	08:45	13.0	275		122		DH59	259	199														
MAY 20	06:00	14.0	355		122		DH59	499															
MAY 21	09:30	15.0	444		122		DH59	896	182														
MAY 22	05:45	14.0	459		122		DH59	1010															
MAY 23	06:15	13.0	436		122		DH59	1750	209														
MAY 24	09:30	12.0	469		122		DH59	1120															
MAY 25	10:30	13.0	534		122		DH59	1090	180														
MAY 26	06:00	12.0	556		122		DH59	1250															
MAY 27	08:30	13.0	572		122		DH59	1290	176														
MAY 28	08:30	12.0	605		122		DH59	1110															
MAY 29	05:30	12.0	570		122		DH59	1120	186														
MAY 30	07:15	11.0	528		122		DH59	930															

NOTE :

TIME SYMBOL: E - ESTIMATED
DISCHARGE SYMBOL(S): W - DAILY MEAN; ICE CONDITIONS
VERTICAL SYMBOL(S): X - NOT AT REGULAR SINGLE SAMPLE VERTICAL

(CONTINUED)

SOUTH SASKATCHEWAN RIVER AT HIGHWAY NO. 41

STATION NO. 05AK001

(CONTINUED)

INSTANTANEOUS SUSPENDED SEDIMENT FOR 1978

DATE	TIME	WATER TEMP. (C)	INSTANT. DISCHARGE (M3/S)		SINGLE SAMPLING VERTICAL (M)		TYPE OF SAMPLER	INSTANT. CONCENT. (MG/L)	DISSOLVED SOLIDS (MG/L)	PERCENT FINER THAN INDICATED SIZE, IN MILLIMETRES .002	.004	.008	.016	.031	.062	.125	.250	.500	1.00	2.00	PERCENT SAND	SILT	CLAY
MAY 31	12:15	12.0	490		122		DH59	567	185														
MAY 31	12:33	13.0	98.0		155	M	D49	474	189														
MAY 31	12:38	13.0	98.0		134	M	D49	475	190														
MAY 31	12:42	13.0	98.0		110	M	D49	619	192														
MAY 31	12:48	13.0	98.0		85.0	M	D49	582	187														
MAY 31	12:54	13.0	98.0		61.0	M	D49	498	187														
MAY 31	13:45	13.0	485		122		DH59	547	186														
JUN 01	19:00	14.0	440		122		DH59	527															
JUN 02	17:00	14.0	430		122		DH59	691	227														
JUN 04	07:00	13.0	574		122		DH59	532	222														
JUN 05	06:00	17.0	548		122		DH59	564															
JUN 06	06:30	18.0	502		122		DH59	507	233														
JUN 07	05:45	13.0	579		122		DH59	673															
JUN 08	06:00	15.0	630		122		DH59	1040	223														
JUN 09	07:00	14.0	742		122		DH59	1100															
JUN 10	06:15	15.0	793		122		DH59	1410	214														
JUN 11	08:30	15.0	794		122		DH59	1220															
JUN 12	06:00	15.0	809		122		DH59	1120	175														
JUN 13	06:30	16.0	820		122		DH59	1050	185														
JUN 14	07:00	15.0	782		122		DH59	1000	174														
JUN 14	12:42		155		164	M	D49	804	164														
JUN 14	12:48		155	E	134	M	D49	831	166														
JUN 14	12:52		155	E	110	M	D49	973	164														
JUN 14	12:59		155	E	85.0	M	D49	1130	162														
JUN 14	13:06		155	E	55.0	M	D49	918	163														
JUN 14	13:30	19.0	775		122		DH59	885	165														
JUN 15	07:30	16.0	740		122		DH59	782	174														
JUN 16	08:30	16.0	705		122		DH59	776	173														
JUN 17	13:45	18.0	647		122		DH59	584	188														
JUN 18	07:30	16.0	579		122		DH59	502															
JUN 19	06:30	15.0	547		122		DH59	507	177														
JUN 20	18:00	17.0	487		122		DH59	490	180														
JUN 22	10:15	17.0	444		122		DH59	369	178														
JUN 23	06:00	16.0	448		122		DH59	292															
JUN 24	05:45	16.0	382		122		DH59	231	174														
JUN 24	05:46	16.0	382		122		DH59	220	166														
JUN 25	11:30	19.0	376		122		DH59	228															
JUN 26	05:30	17.0	414		122		DH59	225	178														
JUN 27	07:15	18.0	423		122		DH59	207															

NOTE :

DISCHARGE SYMBOL(S): E - ESTIMATED
VERTICAL SYMBOL(S): M - A SEDIMENT MEASUREMENT VERTICAL

(CONTINUED)

SOUTH SASKATCHEWAN RIVER AT HIGHWAY NO. 41

STATION NO. 05AK001

INSTANTANEOUS SUSPENDED SEDIMENT FOR 1978

(CONTINUED)

DATE	TIME	WATER TEMP. (C)	INSTANT. DISCHARGE (M3/S)		SINGLE SAMPLING VERTICAL (M)		TYPE OF SAMPLER	INSTANT. CONCENT. (MG/L)	DISSOLVED SOLIDS (MG/L)	PERCENT FINER THAN INDICATED SIZE, IN MILLIMETRES .002	.004	.008	.016	.031	.062	.125	.250	.500	1.00	2.00	PERCENT SAND	SILT	CLAY
JUN 29	12:15	19.0	87.4	E	171	M	D49	120															
JUN 29	12:20	19.0	87.4	E	140	M	D49	133	180														
JUN 29	12:25	19.0	87.4	E	116	M	D49	224															
JUN 29	12:30	19.0	87.4	E	98.0	M	D49	190	183														
JUN 29	12:35	19.0	87.4	E	61.0	M	D49	150															
JUN 29	13:30	19.0	437		122		DH59	212	182														
JUL 01	15:00	19.0	368		122		DH59	178															
JUL 02	08:15	20.0	368		122		DH59	215	167														
JUL 03	05:45	19.0	364		122		DH59	157															
JUL 04	05:30	18.0	356		122		DH59	178	168														
JUL 05	05:45	20.0	392		122		DH59	246															
JUL 06	07:45	18.0	388		122		DH59	170	176														
JUL 07	16:00	18.0	363		122		DH59	385															
JUL 08	08:30	17.0	358		122		DH59	211	167														
JUL 09	09:00	18.0	367		122		DH59	164															
JUL 11	05:30	17.0	355		122		DH59	167	165														
JUL 12	05:30	17.0	377		122		DH59	265															
JUL 13	05:45	18.0	370		122		DH59	261															
JUL 14	05:30	19.0	328		122		DH59	312	169														
JUL 15	05:30	18.0	285		122		DH59	285															
JUL 16	09:30	22.0	274		122		DH59	98	171														
JUL 18	07:45	19.0	262		122		DH59	86															
JUL 20	10:00	18.0	225		122		DH59	64	184														
JUL 22	09:00	19.0	263		122		DH59	65															
JUL 23	10:00	21.0	297		122		DH59	116	197														
JUL 24	05:30	19.0	324		122		DH59	423															
JUL 25	05:45	20.0	326		122		DH59	198	208														
JUL 26	05:30	19.0	276		122		DH59	126															
JUL 27	12:50	24.0	46.6	E	158	M	D49	71	199														
JUL 27	13:00	24.0	46.6	E	134	M	D49	64															
JUL 27	13:10	24.0	46.6	E	110	M	D49	68	193														
JUL 27	13:15	24.0	46.6	E	91.0	M	D49	68															
JUL 27	13:20	24.0	46.6	E	61.0	M	D49	77	190														
JUL 27	14:10	24.0	231		122		DH59	79															
JUL 28	14:15	18.0	228		122		DH59	74	187														
JUL 30	06:30	19.0	215		122		DH59	57															
AUG 01	06:15	18.0	203		122		DH59	53															
AUG 03	06:00	17.0	199		122		DH59	37	188														
AUG 06	09:00	20.0	168		122		DH59	25	195														
AUG 08	06:00	18.0	146		122		DH59	19															
AUG 12	06:00	18.0	115		122		DH59	18	201														

NOTE :

DISCHARGE SYMBOL(S): E - ESTIMATED
VERTICAL SYMBOL(S): M - A SEDIMENT MEASUREMENT VERTICAL

(CONTINUED)

SOUTH SASKATCHEWAN RIVER AT HIGHWAY NO. 41

STATION NO. 05AK001

(CONTINUED)

INSTANTANEOUS SUSPENDED SEDIMENT FOR 1978

DATE	TIME	WATER TEMP. (C)	INSTANT. DISCHARGE (M3/S)		SINGLE SAMPLING VERTICAL (M)		TYPE OF SAMPLER	INSTANT. CONCENT. (MG/L)	DISSOLVED SOLIDS (MG/L)	PERCENT FINER THAN INDICATED SIZE, IN MILLIMETRES .002	.004	.008	.016	.031	.062	.125	.250	.500	1.00	2.00	PERCENT SAND	SILT	CLAY
AUG 13	09:00	19.0	99.1		122		DH59	9															
AUG 15	06:00	17.0	89.8		122		DH59	13	205														
AUG 17	06:45	15.0	95.3		122		DH59	11	208														
AUG 17	06:46	15.0	95.3		122		DH59	9	205														
AUG 18	06:30	15.0	93.9		122		DH59	13	204														
AUG 20	09:00	11.0	127		122		DH59	14															
AUG 22	06:15	13.0	223		122		DH59	43	206														
AUG 24	08:00	15.0	184		122		DH59	89															
AUG 26	07:30	14.0	253		122		DH59	261	209														
AUG 27	10:00	13.0	248		122		DH59	169															
AUG 29	07:00	13.0	207		122		DH59	268	240														
AUG 31	12:00	19.0	161		122		DH59	86	251														
SEP 02	07:00	17.0	157		122		DH59	59															
SEP 03	10:00	16.0	180		122		DH59	56	207														
SEP 05	08:00	15.0	201		122		DH59	63															
SEP 07	10:00	15.0	189		122		DH59	85	186														
SEP 09	07:00	13.0	191		122		DH59	84															
SEP 10	11:30	15.0	193		122		DH59	69	175														
SEP 12	15:30	13.0	250		122		DH59	756															
SEP 14	07:30	12.0	246		122		DH59	554	196														
SEP 16	09:00	12.0	276		122		DH59	168															
SEP 17	10:00	11.0	284		122		DH59	208	212														
SEP 19	08:00	10.0	259		122		DH59	188															
SEP 21	08:00	10.0	247		122		DH59	101	226														
SEP 23	08:00	11.0	223		122		DH59	74															
SEP 24	11:00	12.0	228		122		DH59	59	217														
SEP 26	07:45	13.0	221		122		DH59	48															
SEP 28	09:45	13.0	222		122		DH59	43	195														
SEP 30	07:30	12.0	178		122		DH59	26															
OCT 01	16:30	13.0	217		122		DH59	38	188														
OCT 03	08:00	11.0	190		122		DH59	36															
OCT 03	15:40	11.0	38.8	E	61.0	M	D49	31	179														
OCT 03	15:45	11.0	38.8	E	91.0	M	D49	38	184														
OCT 03	15:50	11.0	38.8	E	116	M	D49	39	179														
OCT 03	16:00	11.0	38.8	E	134	M	D49	32	184														
OCT 03	16:05	11.0	38.8	E	158	M	D49	30	176														
OCT 03	17:15	11.0	196	V	122		DH59	35	179														
OCT 05	08:00	10.0	202		122		DH59	53	184														
OCT 07	08:15	9.0	252	Y	122		DH59	42															
OCT 08	09:30	11.0	225	Y	122		DH59	32	192														
OCT 10	08:00	12.0	171	Y	122		DH59	27															

NOTE :

DISCHARGE SYMBOL(S): E - ESTIMATED V - DAILY MEAN; MANUAL GAUGE Y - DAILY MEAN; ESTIMATED
VERTICAL SYMBOL(S): M - A SEDIMENT MEASUREMENT VERTICAL

(CONTINUED)

SOUTH SASKATCHEWAN RIVER AT HIGHWAY NO. 41

STATION NO. 05AK001

INSTANTANEOUS SUSPENDED SEDIMENT FOR 1978

(CONTINUED)

DATE	TIME	WATER TEMP. (C)	INSTANT. DISCHARGE (M3/S)		SINGLE SAMPLING VERTICAL (M)	TYPE OF SAMPLER	INSTANT. CONCENT. (MG/L)	DISSOLVED SOLIDS (MG/L)	PERCENT FINER THAN INDICATED SIZE, IN MILLIMETRES .002	.004	.008	.016	.031	.062	.125	.250	.500	1.00	2.00	PERCENT SAND	SILT	CLAY
OCT 12	08:30	9.0	171	Y	122	DH59	38	197														
OCT 14	08:15	10.0	160	Y	122	DH59	20															
OCT 15	11:00	12.0	156	Y	122	DH59	21	188														
OCT 17	08:30	9.0	159	Y	122	DH59	17															
OCT 19	11:00	12.0	153	Y	122	DH59	18	201														
OCT 21	08:45	9.0	157	Y	122	DH59	16															
OCT 22	09:30	8.0	150	Y	122	DH59	13															
OCT 24	09:00	8.0	156	Y	122	DH59	113	215														
OCT 26	16:45	7.0	190	Y	122	DH59	47															
OCT 28	09:00	5.0	140	Y	122	DH59	33	217														
OCT 29	09:35	5.0	144	Y	122	DH59	29															
OCT 31	11:00	6.0	142	Y	122	DH59	23	230														
NOV 02	12:30	6.0	152		122	DH59	21															

NOTE :

DISCHARGE SYMBOL(S): Y - DAILY MEAN; ESTIMATED

SOUTH SASKATCHEWAN RIVER AT HIGHWAY NO. 41

STATION NO. 05AK001

INSTANTANEOUS SUSPENDED SEDIMENT FOR 1979

DATE	TIME	WATER TEMP. (C)	INSTANT. DISCHARGE (M3/S)		SINGLE SAMPLING VERTICAL (M)		TYPE OF SAMPLER	INSTANT. CONCENT. (MG/L)	DISSOLVED SOLIDS (MG/L)	PERCENT FINER THAN INDICATED SIZE, IN MILLIMETRES .002	.004	.008	.016	.031	.062	.125	.250	.500	1.00	2.00	PERCENT SAND	SILT	CLAY
APR 19	09:15	3.0	182	H	122		DH59	188	258														
APR 21	08:00	2.0	190	H	122		DH59	168															
APR 22	08:00	2.0	210	H	122		DH59	147															
APR 24	17:15	4.0	218	H	122		DH59	147															
APR 26	08:00	4.0	208	H	122		DH59	139															
APR 28	09:45	5.0	171	H	122		DH59	99															
APR 29	09:30	10.0	179	H	122		DH59	91															
MAY 01	06:00	11.0	207	H	122		DH59	102															
MAY 03	06:45	4.0	253	H	122		DH59	153	266														
MAY 05	07:45	4.0	284	H	122		DH59	236															
MAY 06	10:00	4.0	297	H	122		DH59	301															
MAY 08	07:00	3.0	292	H	122		DH59	285															
MAY 10	06:00	4.0	313	H	122		DH59	269															
MAY 12	05:45	5.0	277	H	122		DH59	356															
MAY 13	08:30	11.0	261	H	122		DH59	369	216														
MAY 15	06:00	12.0	259	H	122		DH59	292															
MAY 17	15:00	13.0	274	H	122		DH59	205															
MAY 19	16:00	13.0	325	H	122		DH59	330															
MAY 20	10:00	13.0	373	H	122		DH59	509															
MAY 21	07:00	14.0	418	H	122		DH59	763															
MAY 22	09:30	14.0	447	H	122		DH59	1030															
MAY 23	06:30	14.0	447	H	122		DH59	869															
MAY 24	05:45	15.0	449	H	122		DH59	916															
MAY 25	06:30	15.0	478	H	122		DH59	545	183														
MAY 26	05:45	16.0	495	H	122		DH59	628															
MAY 27	08:30	17.0	548	H	122		DH59	630															
MAY 28	05:45	16.0	587	H	122		DH59	1080															
MAY 29	05:45	15.0	669	V	122		DH59	1550															
MAY 29	16:00	16.0	669	V	55.0	M	D49	1670	176														
MAY 29	16:09	16.0	669	V	85.0	M	D49	1860															
MAY 29	16:15	16.0	669	V	110	M	D49	1720															
MAY 29	16:20	16.0	669	V	134	M	D49	1650															
MAY 29	16:24	16.0	669	V	165	M	D49	1680															
MAY 29	17:25	16.0	669	V	122		DH59	1740															
MAY 30	06:00	14.0	682		122		DH59	1740															
MAY 31	08:30	13.0	691		122		DH59	1540															
JUN 01	06:00	12.0	686		122		DH59	1280															
JUN 02	08:30	14.0	578		122		DH59	1150															
JUN 03	08:30	14.0	546		122		DH59	769	154														
JUN 04	06:00	16.0	496		122		DH59	573															
JUN 05	06:00	15.0	427		122		DH59	461															

NOTE :

DISCHARGE SYMBOL(S): H - DAILY MEAN V - DAILY MEAN; MANUAL GAUGE
VERTICAL SYMBOL(S): M - A SEDIMENT MEASUREMENT VERTICAL

(CONTINUED)

SOUTH SASKATCHEWAN RIVER AT HIGHWAY NO. 41

STATION NO. 05AK001

INSTANTANEOUS SUSPENDED SEDIMENT FOR 1979

(CONTINUED)

DATE	TIME	WATER TEMP. (C)	INSTANT. DISCHARGE (M3/S)		SINGLE SAMPLING VERTICAL (M)	TYPE OF SAMPLER	INSTANT. CONCENT. (MG/L)	DISSOLVED SOLIDS (MG/L)	PERCENT FINER THAN INDICATED SIZE, IN MILLIMETRES .002	.004	.008	.016	.031	.062	.125	.250	.500	1.00	2.00	PERCENT SAND	SILT	CLAY
JUN 06	06:30	14.0	370		122	DH59	500															
JUN 07	06:30	13.0	382		122	DH59	444															
JUN 08	05:30	12.0	457		122	DH59	500															
JUN 09	06:00	13.0	498		122	DH59	482	170														
JUN 10	11:45	16.0	478		122	DH59	569															
JUN 11	07:00	15.0	435		122	DH59	399															
JUN 12	06:00	17.0	387		122	DH59	344															
JUN 13	06:15	18.0	345		122	DH59	295															
JUN 14	11:00	15.0	302		122	DH59	332															
JUN 16	11:30	16.0	280		122	DH59	258	181														
JUN 17	09:00	15.0	270		122	DH59	176															
JUN 19	06:45	15.0	270		122	DH59	149															
JUN 21	06:30	17.0	255		122	DH59	151															
JUN 23	06:15	16.0	200		122	DH59	110															
JUN 24	09:45	19.0	210		122	DH59	87															
JUN 26	06:15	20.0	189	W	122	DH59	63	221														
JUN 28	05:30	18.0	211	V	122	DH59	54															
JUN 30	06:00	20.0	185	V	122	DH59	55															
JUL 01	09:00	17.0	170	Y	122	DH59	265															
JUL 03	06:45	18.0	152	V	122	DH59	51															
JUL 05	07:30	17.0	139	V	122	DH59	81															
JUL 06	13:10	23.0	139	V	122	DH59	75															
JUL 07	16:00	18.0	126		122	DH59	26	219														
JUL 10	07:00	22.0	116		122	DH59	29															
JUL 12	06:00	20.0	101		122	DH59	13	228														
JUL 14	08:30	17.0	86.0		122	DH59	10															
JUL 15	09:00	17.0	86.8		122	DH59	8															
JUL 17	05:45	19.0	79.6		122	DH59	6	235														
JUL 19	18:00	24.0	80.9		122	DH59	5	237														
JUL 21	08:30	22.0	73.3		122	DH59	6															
JUL 22	09:00	23.0	72.9		122	DH59	5	229														
JUL 24	10:00	20.0	59.7		122	DH59	4															
JUL 25	15:05	21.0	53.6		122	DH59	3	208														
JUL 26	06:00	19.0	52.4		122	DH59	5	188														
JUL 28	08:30	21.0	50.6		122	DH59	2															
JUL 29	11:00	18.0	52.0		122	DH59	24	210														
JUL 31	06:00	18.0	55.5		122	DH59	25															
AUG 02	07:30	19.0	54.9		122	DH59	7	223														
AUG 04	08:00	19.0	58.0		122	DH59	252															
AUG 07	11:30	21.0	54.5		122	DH59	12															
AUG 11	06:45	19.0	56.9		122	DH59	11	240														

NOTE :

DISCHARGE SYMBOL(S): V - DAILY MEAN; MANUAL GAUGE W - DAILY MEAN; ICE CONDITIONS Y - DAILY MEAN; ESTIMATED

(CONTINUED)

SOUTH SASKATCHEWAN RIVER AT HIGHWAY NO. 41

STATION NO. 05AK001

(CONTINUED)

INSTANTANEOUS SUSPENDED SEDIMENT FOR 1979

DATE	TIME	WATER TEMP. (C)	INSTANT. DISCHARGE (M3/S)	SINGLE SAMPLING VERTICAL (M)	TYPE OF SAMPLER	INSTANT. CONCENT. (MG/L)	DISSOLVED SOLIDS (MG/L)	PERCENT FINER THAN INDICATED SIZE, IN MILLIMETRES .002	.004	.008	.016	.031	.062	.125	.250	.500	1.00	2.00	PERCENT SAND	SILT	CLAY
AUG 12	06:15	19.0	66.0	122	DH59	11															
AUG 14	10:30	18.0	53.5	122	DH59	13	236														
AUG 16	06:15	17.0	54.8	122	DH59	10	251														
AUG 18	07:00	18.0	47.4	122	DH59	10	252														
AUG 19	09:30	21.0	44.6	122	DH59	6															
AUG 21	06:30	19.0	45.4	122	DH59	11	220														
AUG 23	08:00	18.0	55.8	122	DH59	9	190														
AUG 25	07:15	18.0	50.8	122	DH59	8	193														
AUG 26	13:00	19.0	52.6	122	DH59	6															
AUG 28	07:00	18.0	64.8	122	DH59	8															
AUG 29	09:20	19.0	70.1	122	DH59	8	183														
AUG 30	10:00	18.0	62.1	122	DH59	6															
SEP 01	06:45	7.0	50.5	122	DH59	3															
SEP 02	17:00	22.0	47.3	122	DH59	3	221														
SEP 04	07:00	17.0	47.2	122	DH59	4															
SEP 06	08:00	16.0	39.6	122	DH59	4															
SEP 08	08:00	17.0	41.6	122	DH59	2	232														
SEP 09	11:00	13.0	41.2	122	DH59	3															
SEP 11	07:30	15.0	41.9	122	DH59	3	247														
SEP 13	08:00	12.0	36.4	122	DH59	10	244														
SEP 15	08:00	15.0	43.8	122	DH59	5															
SEP 16	15:15	18.0	44.7	122	DH59	6															
SEP 18	11:00	17.0	46.5	122	DH59	6															
SEP 20	08:00	15.0	44.1	122	DH59	6															
SEP 22	08:00	13.0	39.3	122	DH59	6	233														
SEP 23	10:00	14.0	38.2	122	DH59	6															
SEP 25	08:30	12.0	38.1	122	DH59	5															
SEP 26	12:00	17.0	37.1	122	DH59	8	280														
SEP 27	07:30	13.0	36.2	122	DH59	4															
SEP 29	09:00	11.0	34.3	122	DH59	2	277														
SEP 30	15:00	12.0	32.6	122	DH59	4															
OCT 02	08:30	11.0	33.8	122	DH59	6															
OCT 04	15:00	13.0	30.0	122	DH59	6	298														
OCT 06	08:30	11.0	31.8	122	DH59	4															
OCT 07	10:30	12.0	31.5	122	DH59	4	317														
OCT 09	08:00	8.0	36.0	122	DH59	3	312														
OCT 11	14:00	12.0	44.4	122	DH59	5	320														
OCT 13	09:30	10.0	47.3	122	DH59	4	313														
OCT 14	08:30	10.0	46.8	122	DH59	8															
OCT 18	11:30	9.0	45.0	122	DH59	6															
OCT 20	16:00	7.0	60.2	122	DH59	23	328														

(CONTINUED)

SOUTH SASKATCHEWAN RIVER AT HIGHWAY NO. 41

STATION NO. 05AK001

INSTANTANEOUS SUSPENDED SEDIMENT FOR 1979

(CONTINUED)

DATE	TIME	WATER TEMP. (C)	INSTANT. DISCHARGE (M3/S)	SINGLE SAMPLING VERTICAL (M)	TYPE OF SAMPLER	INSTANT. CONCENT. (MG/L)	DISSOLVED SOLIDS (MG/L)	PERCENT FINER THAN INDICATED SIZE, IN MILLIMETRES .002	.004	.008	.016	.031	.062	.125	.250	.500	1.00	2.00	PERCENT SAND	SILT	CLAY
OCT 21	10:30	6.0	57.1	122	DH59	69	311														
OCT 23	11:30	8.0	58.1	122	DH59	8															
OCT 25	11:00	7.0	55.9	122	DH59	7	283														
OCT 27	11:30	8.0	52.0	122	DH59	6															
OCT 28	10:30	7.0	48.8	122	DH59	6															
OCT 30	08:00	5.0	44.5	122	DH59	7															
OCT 30	12:00	5.0	43.5	122	DH59	4	283														

SOUTH SASKATCHEWAN RIVER AT HIGHWAY NO. 41 STATION NO. 05AK001

INSTANTANEOUS SUSPENDED SEDIMENT FOR 1980

DATE	TIME	WATER TEMP. (C)	INSTANT. DISCHARGE (M3/S)		SINGLE SAMPLING VERTICAL (M)		TYPE OF SAMPLER	INSTANT. CONCENT. (MG/L)	DISSOLVED SOLIDS (MG/L)	PERCENT FINER THAN INDICATED SIZE, IN MILLIMETRES .002	.004	.008	.016	.031	.062	.125	.250	.500	1.00	2.00	PERCENT SAND	SILT	CLAY
MAY 27	13:50	17.0	357	H	61.0	M	DH59	387	230	34	41	59	72	84	89	95	99	100			11	48	41
MAY 27	14:00E	17.0	357	H	91.0	M	DH59	429	246	39	47	65	80	88	92	96	99	100			8	45	47
MAY 27	14:10E	17.0	357	H	116	M	DH59	440	231	37	44	61	77	85	90	92	95	98	99	100	10	46	44
MAY 27	14:15E	17.0	357	H	134	M	DH59	389	229	38	47	63	81	90	95	98	100				5	48	47
MAY 27	14:20	17.0	357	H	158	M	DH59	340	244	37	43	63	80	90	97	99	100				3	54	43
MAY 28	11:15	14.0	525		122		DH59	2530	249	15	22	32	46	61	78	85	94	98	99	100	22	56	22
MAY 30	11:30	13.0	1030		122		DH59	4880	229	9	15	30	51	68	79	84	88	92	93	100	21	64	15
MAY 31	12:30	14.0	857		122		DH59	2290	199	15	20	33	50	62	72	79	85	90	93	100	28	52	20
JUN 02	08:00	14.0	711		122		DH59	1090	187	15	21	33	45	55	66	75	86	93	96	100	34	45	21
JUN 27	11:30	17.0	351		122		DH59	2740	190	19	31	55	67	81	91	95	97	99	100		9	60	31

NOTE :

TIME SYMBOL: E - ESTIMATED
DISCHARGE SYMBOL(S): H - DAILY MEAN
VERTICAL SYMBOL(S): M - A SEDIMENT MEASUREMENT VERTICAL

SOUTH SASKATCHEWAN RIVER AT HIGHWAY NO. 41 STATION NO. 05AK001

INSTANTANEOUS SUSPENDED SEDIMENT FOR 1981

DATE	TIME	WATER TEMP. (C)	INSTANT. DISCHARGE (M3/S)		SINGLE SAMPLING VERTICAL (M)		TYPE OF SAMPLER	INSTANT. CONCENT. (MG/L)	DISSOLVED SOLIDS (MG/L)	PERCENT FINER THAN INDICATED SIZE, IN MILLIMETRES .002	.004	.008	.016	.031	.062	.125	.250	.500	1.00	2.00	PERCENT SAND	SILT	CLAY
MAY 25	17:00	15.0	1540	V	122		DH59	4210	218	21	30	45	63	81	93	98	100				7	63	30
MAY 28	13:50	14.0	1500	V	49.0	M	DH59	1780	182	16	27	38	53	68	82	93	99	100			18	55	27
MAY 28	14:40	14.0	1500	V	83.0	M	DH59	1880	187	19	25	37	50	65	78	88	95	99	99	100	22	53	25
MAY 28	15:30	14.0	1500	V	110	M	DH59	1720	183	21	27	40	56	72	87	97	100				13	60	27
MAY 28	16:25	14.0	1500	V	134	M	DH59	1980	185	20	25	40	54	69	83	90	97	99	100		17	58	25
MAY 28	17:15	14.0	1500	V	158	M	DH59	1700	185	17	28	42	57	71	88	98	100				12	60	28
MAY 31	07:00		1330		122		DH59	1390	182	20	25	34	49	65	77	88	98	99	100		23	52	25

NOTE :

DISCHARGE SYMBOL(S): V - DAILY MEAN; MANUAL GAUGE
VERTICAL SYMBOL(S): M - A SEDIMENT MEASUREMENT VERTICAL

SOUTH SASKATCHEWAN RIVER AT HIGHWAY NO. 41 STATION NO. 05AK001

INSTANTANEOUS SUSPENDED SEDIMENT FOR 1982

DATE	TIME	WATER TEMP. (C)	INSTANT. DISCHARGE (M3/S)		SINGLE SAMPLING VERTICAL (M)	TYPE OF SAMPLER	INSTANT. CONCENT. (MG/L)	DISSOLVED SOLIDS (MG/L)	PERCENT FINER THAN INDICATED SIZE, IN MILLIMETRES .002	.004	.008	.016	.031	.062	.125	.250	.500	1.00	2.00	PERCENT SAND	SILT	CLAY
MAY 20	08:30	14.0	110		122	DH59	706	236	49	64	92	95	97	97	99	99	100			3	33	64
JUL 05	09:15	16.0	582	Y	122	DH59	1390	192	23	31	45	61	71	82	90	96	98	99	100	18	51	31
JUL 05	09:20	16.0	582	Y	122	DH59	1560	201	24	32	46	62	72	80	85	92	96	97	100	20	48	32

NOTE :

DISCHARGE SYMBOL(S): Y - DAILY MEAN; ESTIMATED

SOUTH SASKATCHEWAN RIVER AT HIGHWAY NO. 41 STATION NO. 05AK001

INSTANTANEOUS SUSPENDED SEDIMENT FOR 1983

DATE	TIME	WATER TEMP. (C)	INSTANT. DISCHARGE (M3/S)	SINGLE SAMPLING VERTICAL (M)	TYPE OF SAMPLER	INSTANT. CONCENT. (MG/L)	DISSOLVED SOLIDS (MG/L)	PERCENT FINER THAN INDICATED SIZE, IN MILLIMETRES .002	.004	.008	.016	.031	.062	.125	.250	.500	1.00	2.00	PERCENT SAND	SILT	CLAY
JUL 03	16:00	16.0	147	122	DH59	629	215	39	49	64	82	93	96	98	99	100			4	47	49
JUL 21	07:00	18.0	185	122	DH59	2610	213	31	43	59	75	88	98	99	100				2	55	43

SOUTH SASKATCHEWAN RIVER AT HIGHWAY NO. 41 STATION NO. 05AK001

INSTANTANEOUS SUSPENDED SEDIMENT FOR 1984

DATE	TIME	WATER TEMP. (C)	INSTANT. DISCHARGE (M3/S)		SINGLE SAMPLING VERTICAL (M)	TYPE OF SAMPLER	INSTANT. CONCENT. (MG/L)	DISSOLVED SOLIDS (MG/L)	PERCENT FINER THAN INDICATED SIZE, IN MILLIMETRES .002	.004	.008	.016	.031	.062	.125	.250	.500	1.00	2.00	PERCENT SAND	SILT	CLAY
APR 01	10:15	5.0	83.4	Y	MID	DH59	31	245														
APR 03	09:30	7.0	87.3	V	MID	DH59	34															
APR 05	13:00	8.0	81.0		MID	DH59	23															
APR 07	07:00	6.0	70.4		MID	DH59	19	262														
APR 08	16:00	9.0	58.7		MID	DH59	18															
APR 10	12:00E	10.0	75.7	H	MID	DH59	23															
APR 12	07:00	7.0	65.7		MID	DH59	17	254														
APR 14	07:45	8.0	68.7		MID	DH59	16															
APR 15	09:00	9.0	69.2		MID	DH59	19															
APR 17	06:45	11.0	64.5		MID	DH59	14															
APR 19	05:45	12.0	59.1		MID	DH59	9															
APR 21	06:45	10.0	79.4		MID	DH59	12	236														
APR 22	11:45	10.0	62.9		MID	DH59	12															
APR 24	05:45	9.0	59.1		MID	DH59	8															
APR 26	08:00	7.0	72.5		MID	DH59	21															
APR 28	05:45	6.0	80.6		MID	DH59	14	248														
APR 29	14:00	8.0	72.5		MID	DH59	10	252														
MAY 01	06:30	7.0	64.4		MID	DH59	7															
MAY 03	07:15	9.0	50.7		MID	DH59	6	257														
MAY 05	11:45	10.0	30.0		MID	DH59	5	254														
MAY 06	16:30	8.0	26.7		MID	DH59	13	257														
MAY 10	06:45	8.0	23.2		MID	DH59	10	271														
MAY 12	07:00	10.0	20.5		MID	DH59	8	268														
MAY 13	09:45	11.0	16.6		MID	DH59	6	246														
MAY 15	08:20	11.0	21.0		MID	DH59	8															
MAY 15	10:00	11.0	21.0		MID	DH59	13	271														
MAY 16	07:30	10.0	25.2		MID	DH59	92															
MAY 17	07:15	9.0	34.0		MID	DH59	76															
MAY 18	07:15	9.0	32.0		MID	DH59	41	282														
MAY 19	05:30	9.0	24.1		MID	DH59	19															
MAY 20	17:30	11.0	25.9		MID	DH59	17															
MAY 21	05:45	10.0	26.3		MID	DH59	18	295														
MAY 22	06:00	9.0	89.5		MID	DH59	91															
MAY 23	06:15	10.0	85.9		MID	DH59	54															
MAY 24	07:30	10.0	76.6		MID	DH59	44															
MAY 25	06:15	9.0	76.9		MID	DH59	21	329														
MAY 26	06:00	9.0	94.5		MID	DH59	32															
MAY 27	10:00	10.0	83.5		MID	DH59	25	262														
MAY 28	07:15	10.0	75.5		MID	DH59	23															
MAY 29	07:30	11.0	74.5		MID	DH59	22															
MAY 30	08:30	16.0	73.2		MID	DH59	21															

NOTE :

TIME SYMBOL: E - ESTIMATED
DISCHARGE SYMBOL(S): H - DAILY MEAN V - DAILY MEAN; MANUAL GAUGE Y - DAILY MEAN; ESTIMATED

(CONTINUED)

SOUTH SASKATCHEWAN RIVER AT HIGHWAY NO. 41

STATION NO. 05AK001

INSTANTANEOUS SUSPENDED SEDIMENT FOR 1984

(CONTINUED)

DATE	TIME	WATER TEMP. (C)	INSTANT. DISCHARGE (M3/S)	SINGLE SAMPLING VERTICAL (M)	TYPE OF SAMPLER	INSTANT. CONCENT. (MG/L)		DISSOLVED SOLIDS (MG/L)	PERCENT FINER THAN INDICATED SIZE, IN MILLIMETRES .002	.004	.008	.016	.031	.062	.125	.250	.500	1.00	2.00	PERCENT SAND	SILT	CLAY
MAY 31	07:00	12.0	66.0	MID	DH59	34		239														
JUN 01	18:00	13.0	58.3	MID	DH59	29		233														
JUN 02	09:00	11.0	58.1	MID	DH59	21																
JUN 03	09:30	13.0	55.2	MID	DH59	18																
JUN 04	17:00	14.0	77.5	MID	DH59	21		242														
JUN 05	12:40	14.0	126	MID	DH59	59																
JUN 05	16:15	14.0	126	MID	DH59	64		257														
JUN 06	09:30	14.0	115	MID	DH59	64																
JUN 07	07:30	15.0	104	MID	DH59	54																
JUN 08	07:00	13.0	89.4	MID	DH59	81		230														
JUN 09	13:15	15.0	90.0	MID	DH59	54																
JUN 10	10:00	15.0	82.9	MID	DH59	51		221														
JUN 11	16:00	17.0	87.1	MID	DH59	40		220														
JUN 12	07:45	16.0	96.5	MID	DH59	51		224														
JUN 13	10:00	18.0	131	MID	DH59	108		234														
JUN 14	06:30	17.0	198	MID	DH59	207		245														
JUN 15	10:00	18.0	194	MID	DH59	113		227														
JUN 17	17:30	19.0	158	MID	DH59	198																
JUN 18	16:30	20.0	183	MID	DH59	152																
JUN 19	06:15	18.0	210	MID	DH59	177																
JUN 20	06:30	19.0	245	MID	DH59	211																
JUN 21	07:00	17.0	250	MID	DH59	170		211														
JUN 22	08:15	17.0	230	MID	DH59	296																
JUN 23	20:00	18.0	261	MID	DH59	371		202														
JUN 24	10:00	18.0	257	MID	DH59	414																
JUN 25	07:00	17.0	234	MID	DH59	361																
JUN 26	00:00	17.0	223	MID	DH59	466																
JUN 26	15:15	22.0	223	MID	DH59	527		222														
JUN 26	15:16	22.0	223	MID	DH59	500		217														
JUN 28	07:00	19.0	184	MID	DH59	142																
JUN 29	06:00	18.0	202	MID	DH59	219																
JUN 30	05:45	16.0	189	MID	DH59	180																
JUL 01	10:30	17.0	199	MID	DH59	120		195														
JUL 01	10:31	7.0	199	MID	DH59	204	C	200														
JUL 04	09:00	17.0	231	MID	DH59	112		182														
JUL 04	09:01	7.0	231	MID	DH59	199	C	189														
JUL 07	07:00	17.0	229	MID	DH59	114		179														
JUL 07	07:01	7.0	229	MID	DH59	348	C	192														
JUL 08	07:15	16.0	202	MID	DH59	97		167														
JUL 08	07:16	16.0	202	MID	DH59	101		169														

NOTE :

CONCENTRATION SYMBOL(S): C - COARSE MATERIAL PRESENT

CONCENTRATION SYMBOL(S):

(CONTINUED)

SOUTH SASKATCHEWAN RIVER AT HIGHWAY NO. 41

STATION NO. 05AK001

(CONTINUED)

INSTANTANEOUS SUSPENDED SEDIMENT FOR 1984

DATE	TIME	WATER TEMP.	INSTANT. DISCHARGE (M3/S)		SINGLE SAMPLING VERTICAL (M)		TYPE OF SAMPLER	INSTANT. CONCENT. (MG/L)	DISSOLVED SOLIDS (MG/L)	PERCENT FINER THAN INDICATED SIZE, IN MILLIMETRES .002	.004	.008	.016	.031	.062	.125	.250	.500	1.00	2.00	PERCENT SAND	SILT	CLAY
JUL 10	10:50	20	111		MID		DH59	34	161														
JUL 10	10:51	20	111		MID		DH59	35	160														
JUL 11	15:00	21.0	81.1		MID		DH59	20	169														
JUL 11	15:01	21.0	81.1		MID		DH59	22	161														
JUL 14	13:45	19.0	81.0	V	MID		DH59	22	179														
JUL 14	13:46	19.0	81.0	V	MID		DH59	20	177														
JUL 15	10:30	20.0	76.4	Y	MID		DH59	15															
JUL 18	13:30	20.0	62.4	Y	MID		DH59	10															
JUL 21	16:30	18.0	48.5	Y	MID		DH59	9	200														
JUL 22	11:45	16.0	39.2	Y	MID		DH59	9															
JUL 24	14:42	22.0	34.5	V	MID		DH59	5															
JUL 25	18:30	23.0	34.4		MID		DH59	6															
JUL 29	10:45	21.0	36.0		MID		DH59	6															
AUG 06	11:00	24.0	81.5		MID		DH59	44	241														
AUG 13	10:30	22.0	46.8		MID		DH59	14	224														
AUG 13	10:31	22.0	46.8		MID		DH59	17	215														
AUG 18	11:00	22.0	37.5		MID		DH59	13															
AUG 26	10:45	21.0	29.6		MID		DH59	11															
AUG 31	09:30	17.0	27.0	Y	MID		DH59	10	255														
SEP 09	10:00	10.0	39.0		MID		DH59	129															
SEP 11	13:02	9.0	38.0		MID		DH59	12															
SEP 16	10:00	12.0	41.2		MID		DH59	13															
SEP 25	13:30	7.0	24.7		MID		DH59	26															
SEP 30	13:00	13.0	49.5		MID		DH59	17	292														
OCT 02	10:50	8.0	40.3		100	X	DH48	18	290														
OCT 07	14:00	12.0	29.7		MID		DH59	12															
OCT 13	12:00E		34.2	H	MID		DH59	21	323														
OCT 21	12:00E		36.3	H	MID		DH59	31	317														

NOTE :

TIME SYMBOL: E - ESTIMATED
DISCHARGE SYMBOL(S): H - DAILY MEAN V - DAILY MEAN; MANUAL GAUGE Y - DAILY MEAN; ESTIMATED
VERTICAL SYMBOL(S): X - NOT AT REGULAR SINGLE SAMPLE VERTICAL

SOUTH SASKATCHEWAN RIVER AT HIGHWAY NO. 41

STATION NO. 05AK001

INSTANTANEOUS SUSPENDED SEDIMENT FOR 1985

DATE	TIME	WATER TEMP. (C)	INSTANT. DISCHARGE (M3/S)	SINGLE SAMPLING VERTICAL (M)	TYPE OF SAMPLER	INSTANT. CONCENT. (MG/L)	DISSOLVED SOLIDS (MG/L)	PERCENT FINER THAN INDICATED SIZE, IN MILLIMETRES .002	.004	.008	.016	.031	.062	.125	.250	.500	1.00	2.00	PERCENT SAND	PERCENT SILT	PERCENT CLAY
MAY 09	12:00	15.0	101	70.0 X	D49	52	300														
MAY 28	11:20	15.0	259	110	D49	356	193														
JUN 25	09:30	16.0	84.3	110	D49	34	205														
JUL 16	11:25	25.0	26.8	110	D49	9	255														
AUG 13	09:35	11.0	33.5	110	D49	14	260														
SEP 09	12:55	11.0	19.5	110	D49	5	266														
SEP 17	12:30	7.0	361	110	D49	457	316	8	12	24	31	47	63	76	90	99	100		37	51	12
OCT 01	09:15	1.5	62.5	110	D49	34	268														
OCT 29	09:09	2.0	164	110	D49	72	255														

NOTE :

VERTICAL SYMBOL(S): X - NOT AT REGULAR SINGLE SAMPLE VERTICAL

SOUTH SASKATCHEWAN RIVER AT HIGHWAY NO. 41 STATION NO. 05AK001

INSTANTANEOUS SUSPENDED SEDIMENT FOR 1986

DATE	TIME	WATER TEMP. (C)	INSTANT. DISCHARGE (M3/S)	SINGLE SAMPLING VERTICAL (M)		TYPE OF SAMPLER	INSTANT. CONCENT. (MG/L)	DISSOLVED SOLIDS (MG/L)	PERCENT FINER THAN INDICATED SIZE, IN MILLIMETRES .002	.004	.008	.016	.031	.062	.125	.250	.500	1.00	2.00	PERCENT SAND	SILT	CLAY
APR 29	12:50	5.0	144	110		D49	52	237														
MAY 12	14:47	6.0	124	110		D49	44	230														
MAY 28	09:55	10.0	423	110		D49	565	222	16	30	47	64	72	78	82	93	100			22	48	30
JUN 16	13:17	18.5	464	110		D49	358	200	7	14	29	40	57	66	77	97	100			34	52	14
JUL 15	13:30	20.0	80.4	110		D49	19	202														
AUG 18	13:08	12.0	53.3	110		D49	15	387														
SEP 23	12:05	10.0	93.8	110		D49	29	250														
OCT 21	14:15	10.0	191	65.0	M	D49	58	257														
OCT 21	14:30	10.0	191	95.0	M	D49	61	249														
OCT 21	15:05	10.0	191	110		D49	66	247														
OCT 21	15:10	10.0	191	105	M	D49	66	245														
OCT 21	15:15	10.0	191	130	M	D49	64	251														
OCT 21	15:20	10.0	191	155	M	D49	62	248														

NOTE :

VERTICAL SYMBOL(S): M - A SEDIMENT MEASUREMENT VERTICAL

SOUTH SASKATCHEWAN RIVER AT HIGHWAY NO. 41 STATION NO. 05AK001

INSTANTANEOUS SUSPENDED SEDIMENT FOR 1987

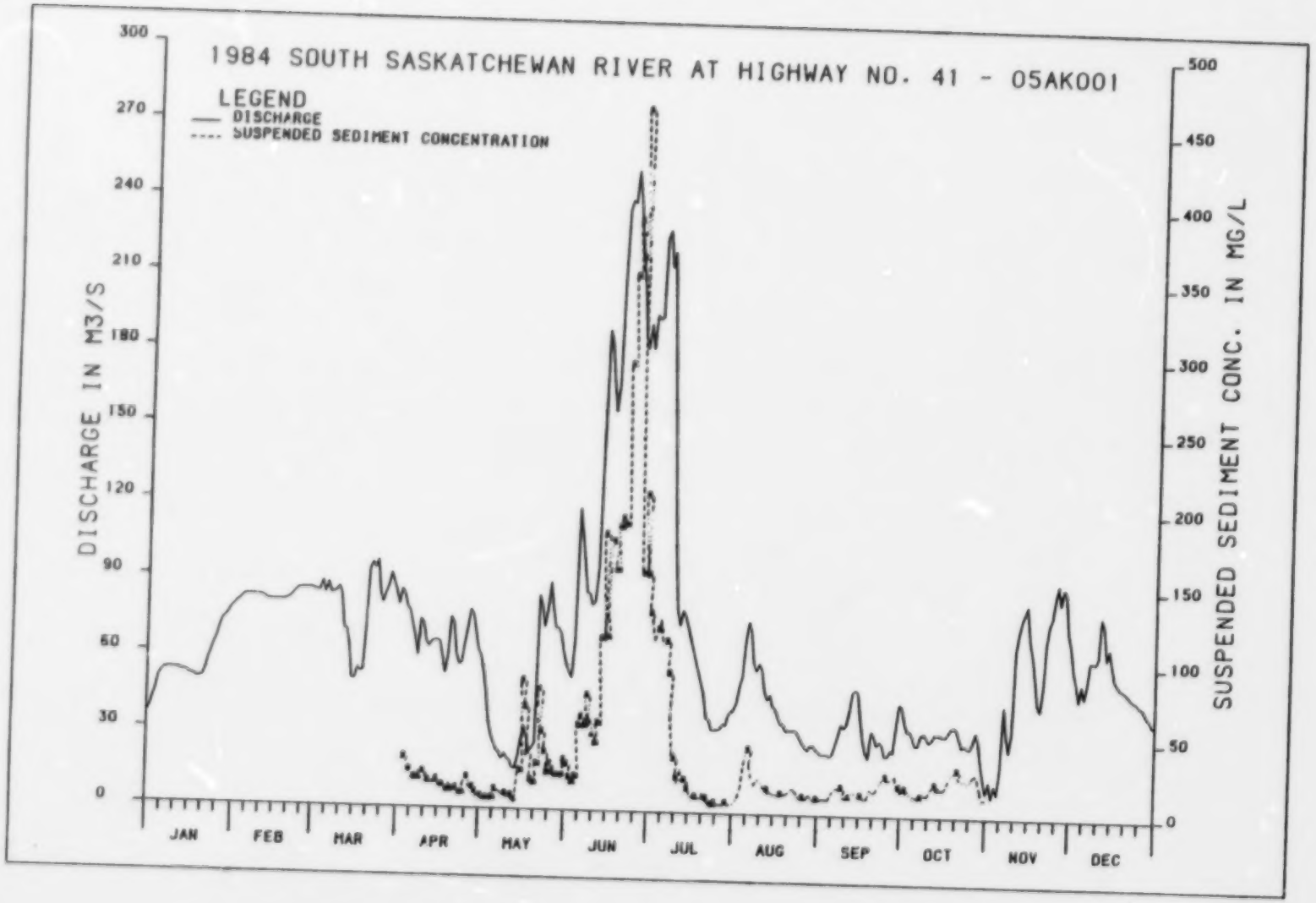
DATE	TIME	WATER TEMP. (C)	INSTANT. DISCHARGE (M3/S)	SINGLE SAMPLING VERTICAL (M)	TYPE OF SAMPLER	INSTANT. CONCENT. (MG/L)	DISSOLVED SOLIDS (MG/L)	PERCENT FINER THAN INDICATED SIZE, IN MILLIMETRES .002	.004	.008	.016	.031	.062	.125	.250	.500	1.00	2.00	PERCENT SAND	SILT	CLAY
APR 22	14:10	4.0	144	110	D49	66	260														
MAY 20	09:35	9.0	281	110	D49	246	213														
JUN 02	09:30	7.0	103	110	D49	58	248														
JUN 22	11:50	16.0	79.7	110	D49	38	245														
JUL 21	09:00	18.0	58.8	110	D49	20	234														
AUG 11	09:00	15.0	48.4	110	D49	28	236														
SEP 09	09:00	16.0	134	110	D49	57	204														
SEP 29	08:05	11.5	46.3	110	D49	9	204														
NOV 03	09:10	4.0	84.7	110	D49	16	251														

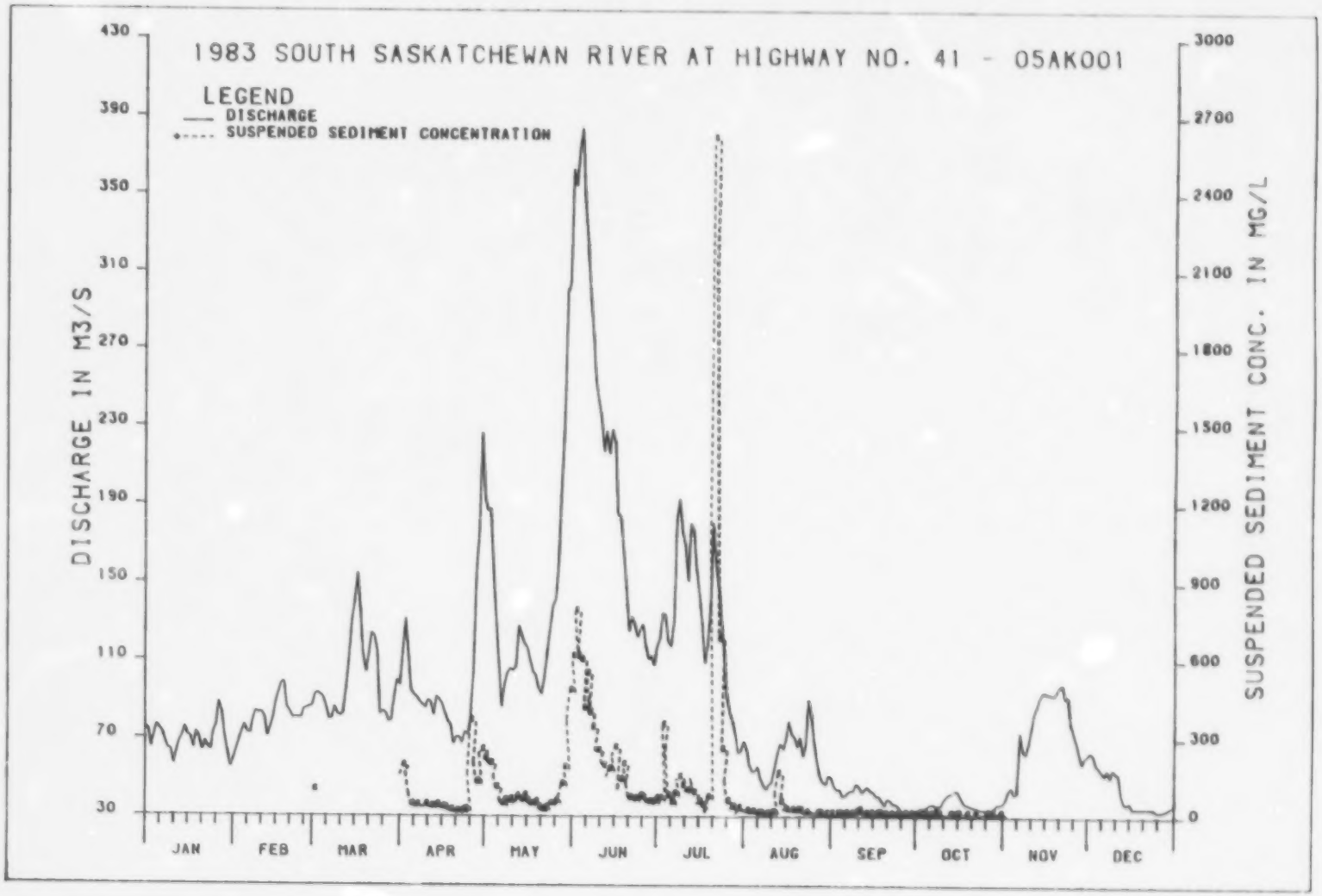
NOTE : SINGLE VERTICAL LOCATED AT 110 METRES FOR 1987

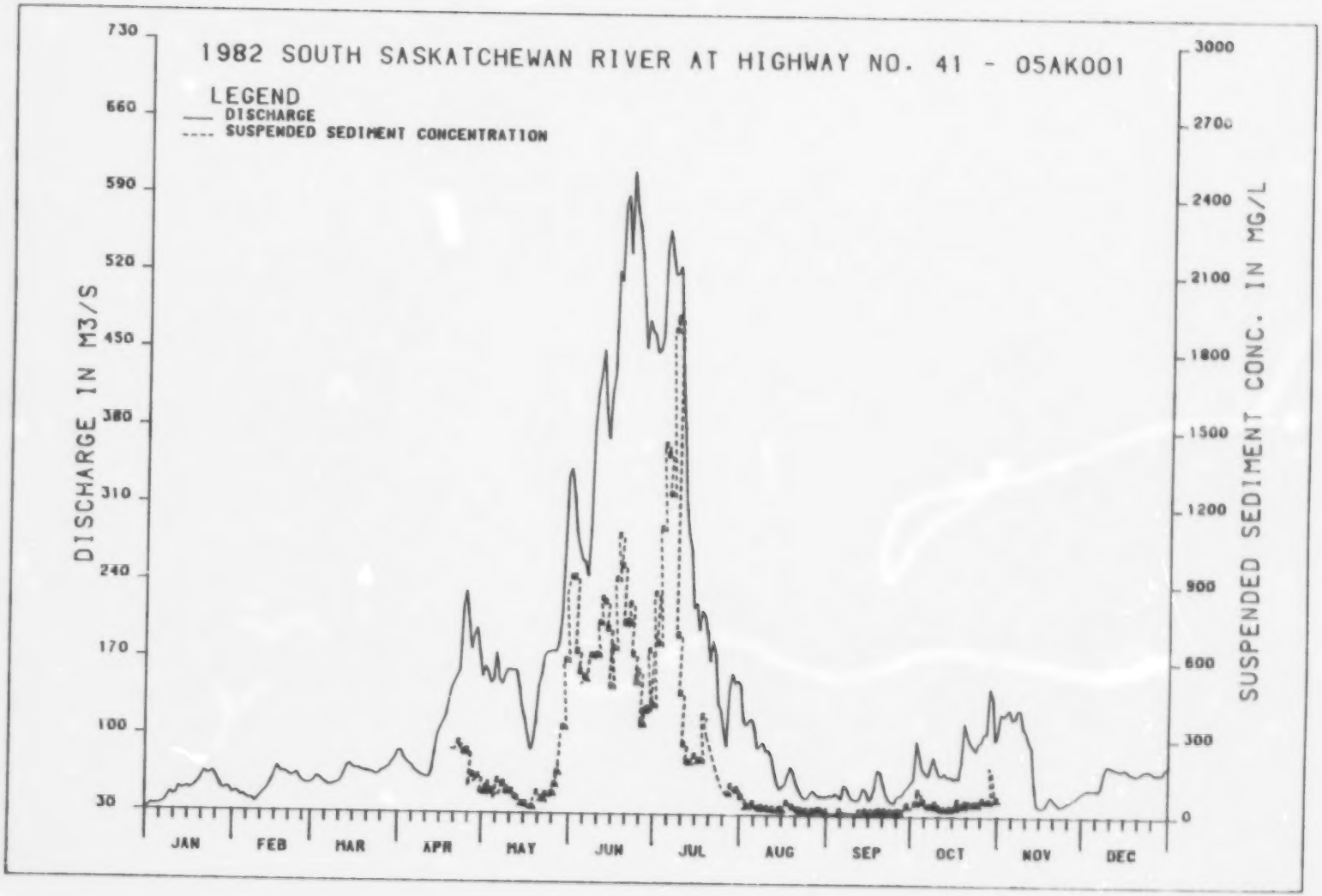
APPENDIX C

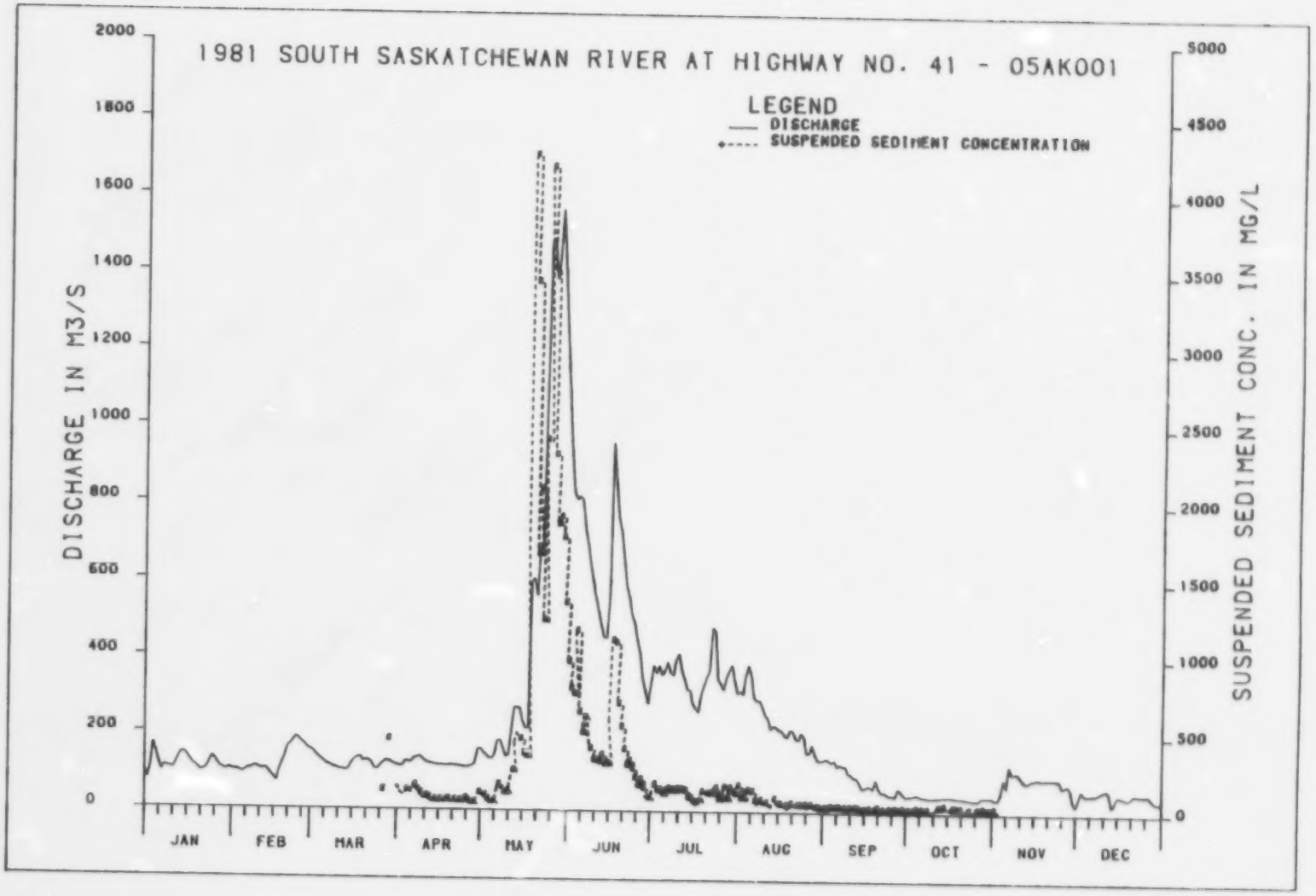
ANNUAL SUSPENDED-SEDIMENT DATA HYDROGRAPHS

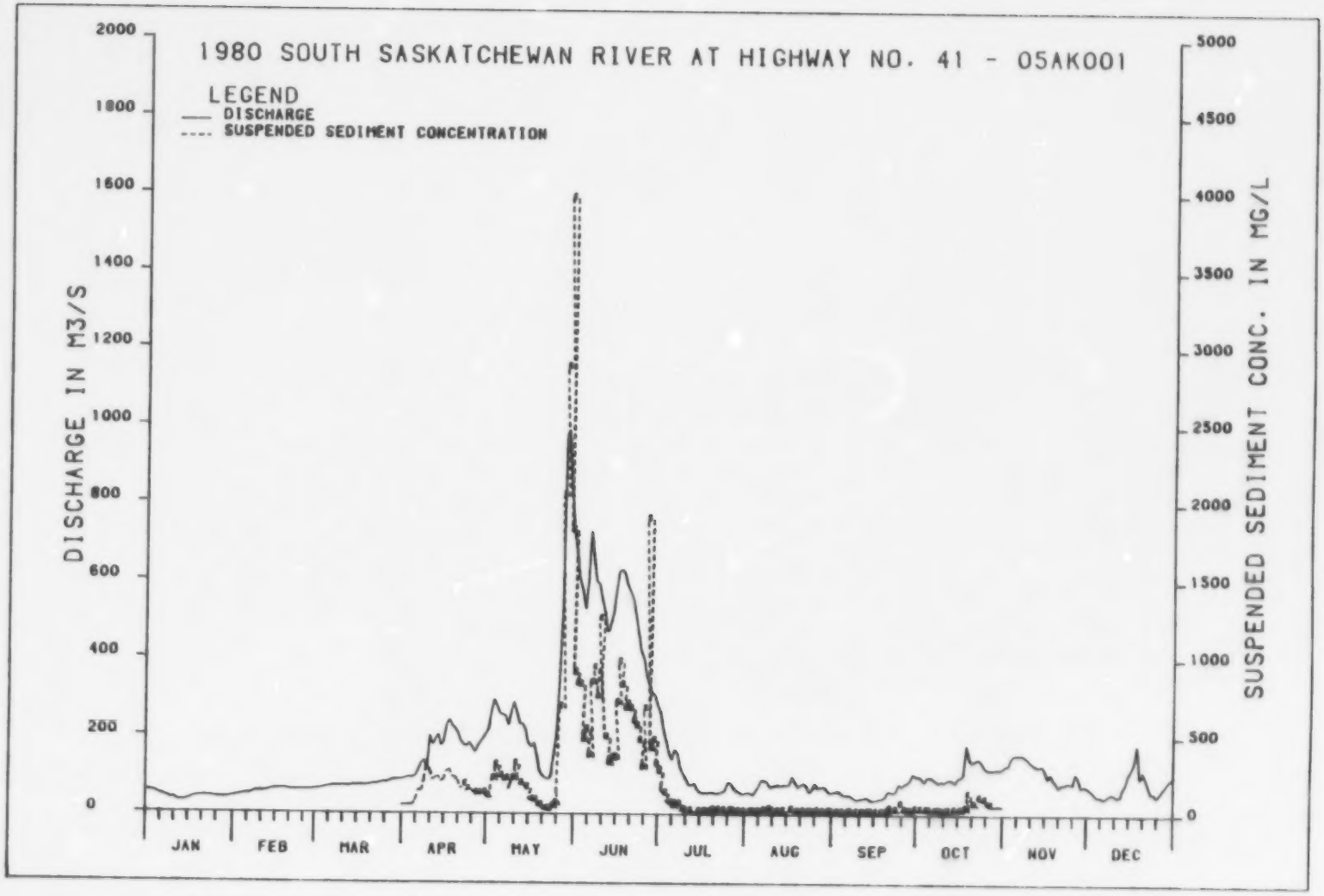
Days sampled are identified by the symbol "S".
Hydrographs are not available for 1985 and 1986
as loads were not determined for these years.

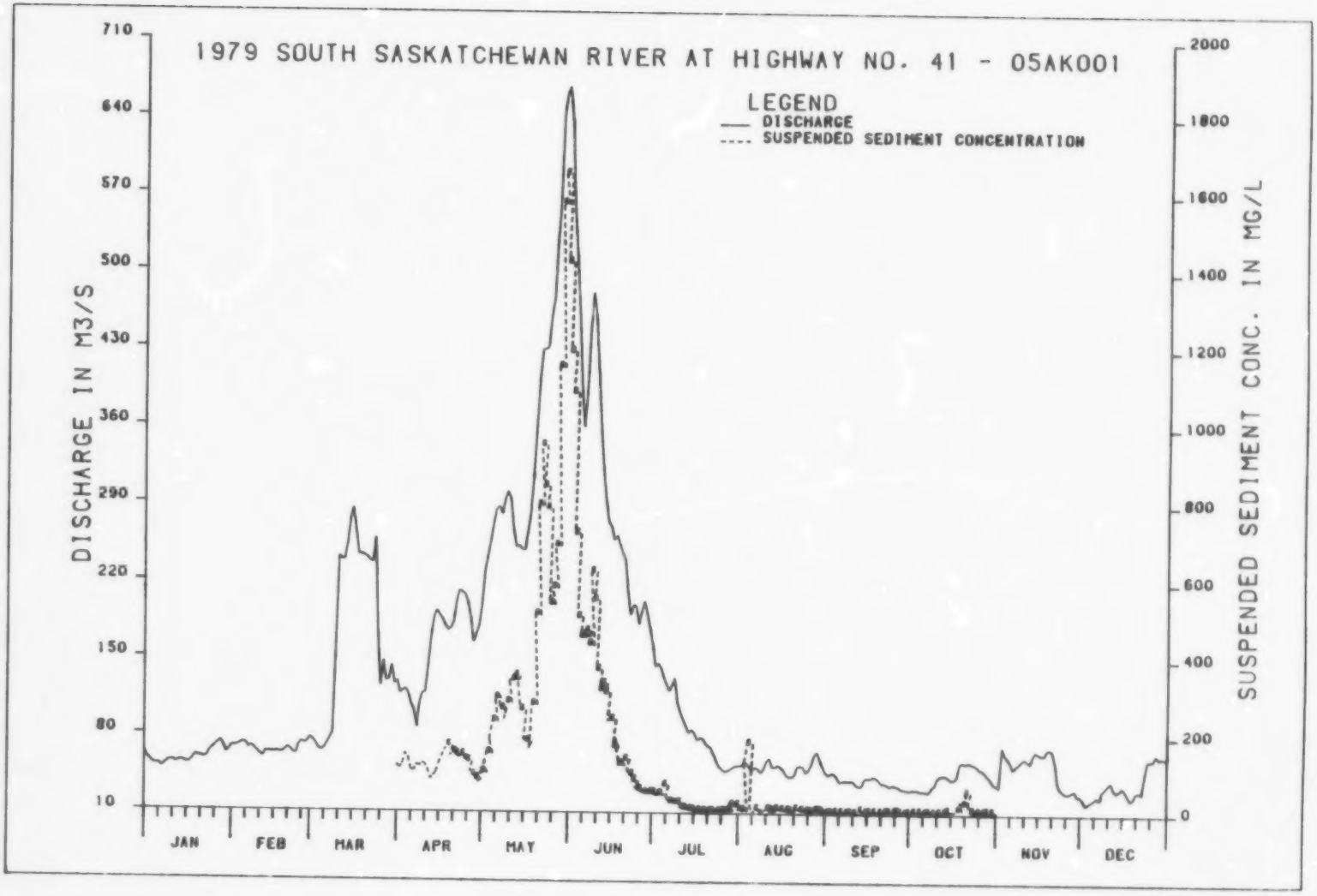

1984 SOUTH SASKATCHEWAN RIVER AT HIGHWAY NO. 41 - 05AK001
LEGEND
DISCHARGE
SUSPENDED SEDIMENT CONCENTRATION
DISCHARGE IN M3/S
SUSPENDED SEDIMENT CONC. IN MG/L
300
270
240
210
180
150
120
90
60
30
0
500
450
400
350
300
250
200
150
100
50
0
JAN
FEB
MAR
APR
MAY
JUN
JUL
AUG
SEP
OCT
NOV
DEC

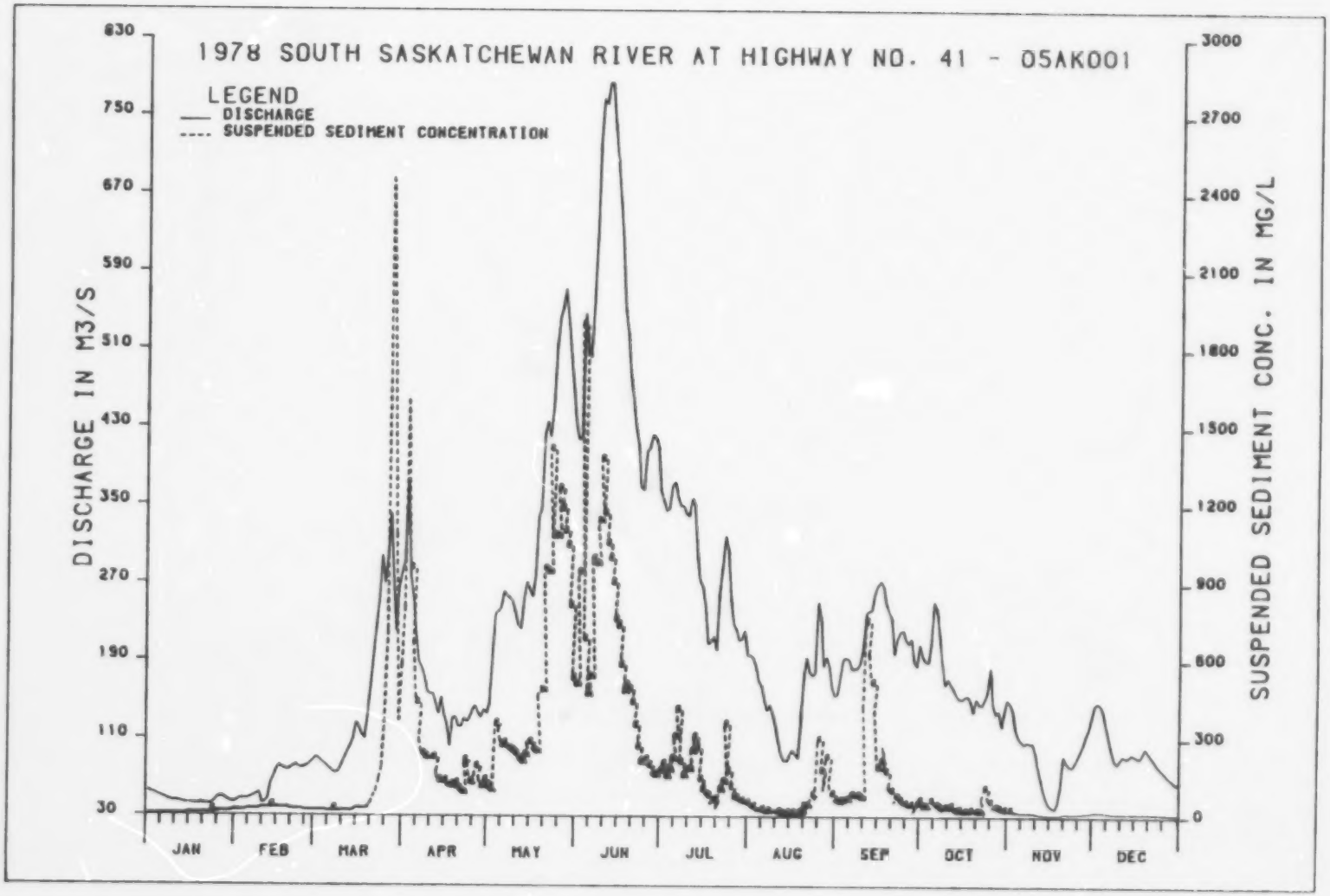

1983 SOUTH SASKATCHEWAN RIVER AT HIGHWAY NO. 41 - 05AK001
LEGEND
DISCHARGE
SUSPENDED SEDIMENT CONCENTRATION
DISCHARGE IN M3/S
SUSPENDED SEDIMENT CONC. IN MG/L
430
390
350
310
270
230
190
150
110
70
30
3000
2700
2400
2100
1800
1500
1200
900
600
300
0
JAN
FEB
MAR
APR
MAY
JUN
JUL
AUG
SEP
OCT
NOV
DEC

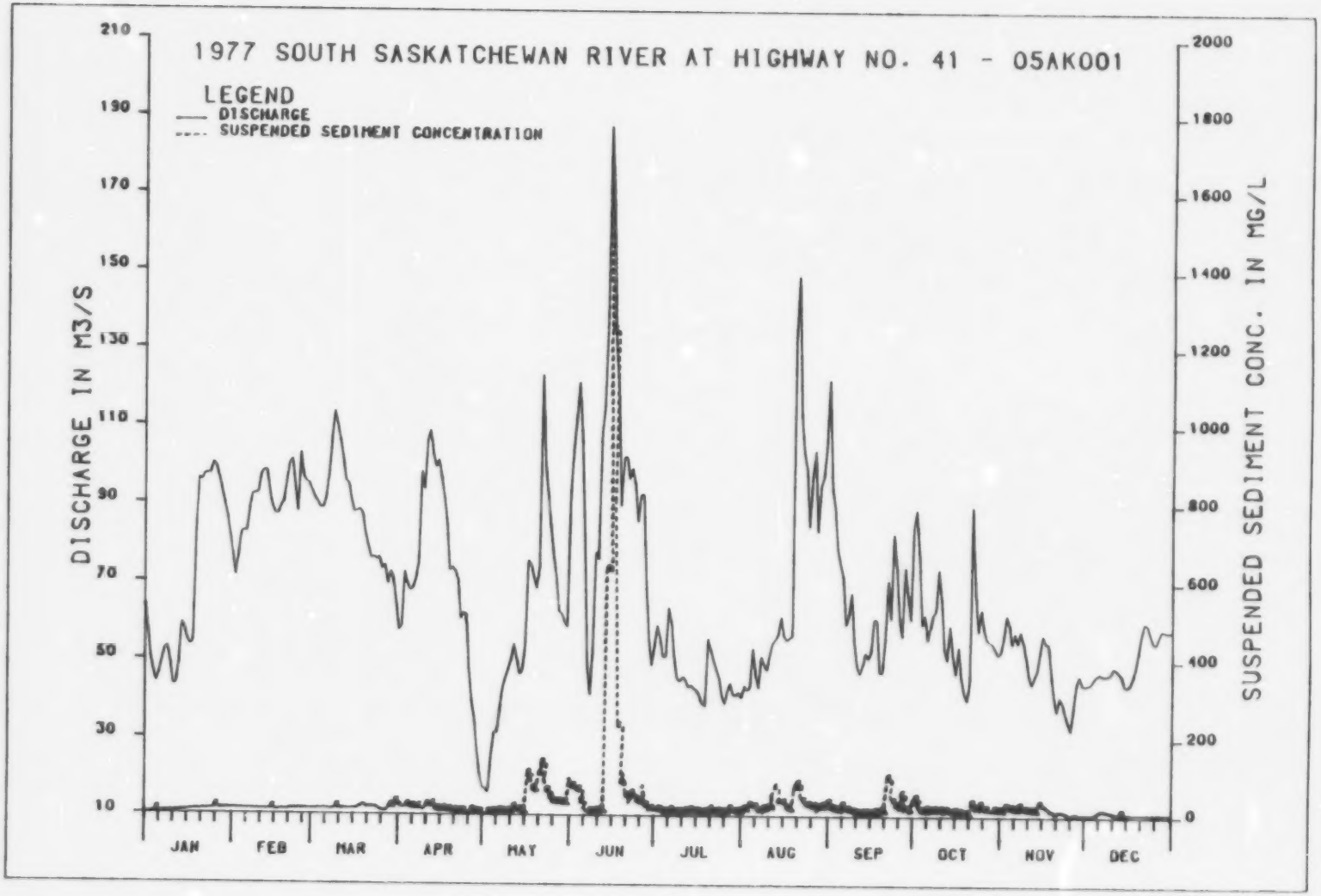

1982 SOUTH SASKATCHEWAN RIVER AT HIGHWAY NO. 41 - 05AK001
LEGEND
DISCHARGE
SUSPENDED SEDIMENT CONCENTRATION
DISCHARGE IN M3/S
730
660
590
520
450
380
310
240
170
100
30
SUSPENDED SEDIMENT CONC. IN MG/L
3000
2700
2400
2100
1800
1500
1200
900
600
300
0
JAN
FEB
MAR
APR
MAY
JUN
JUL
AUG
SEP
OCT
NOV
DEC

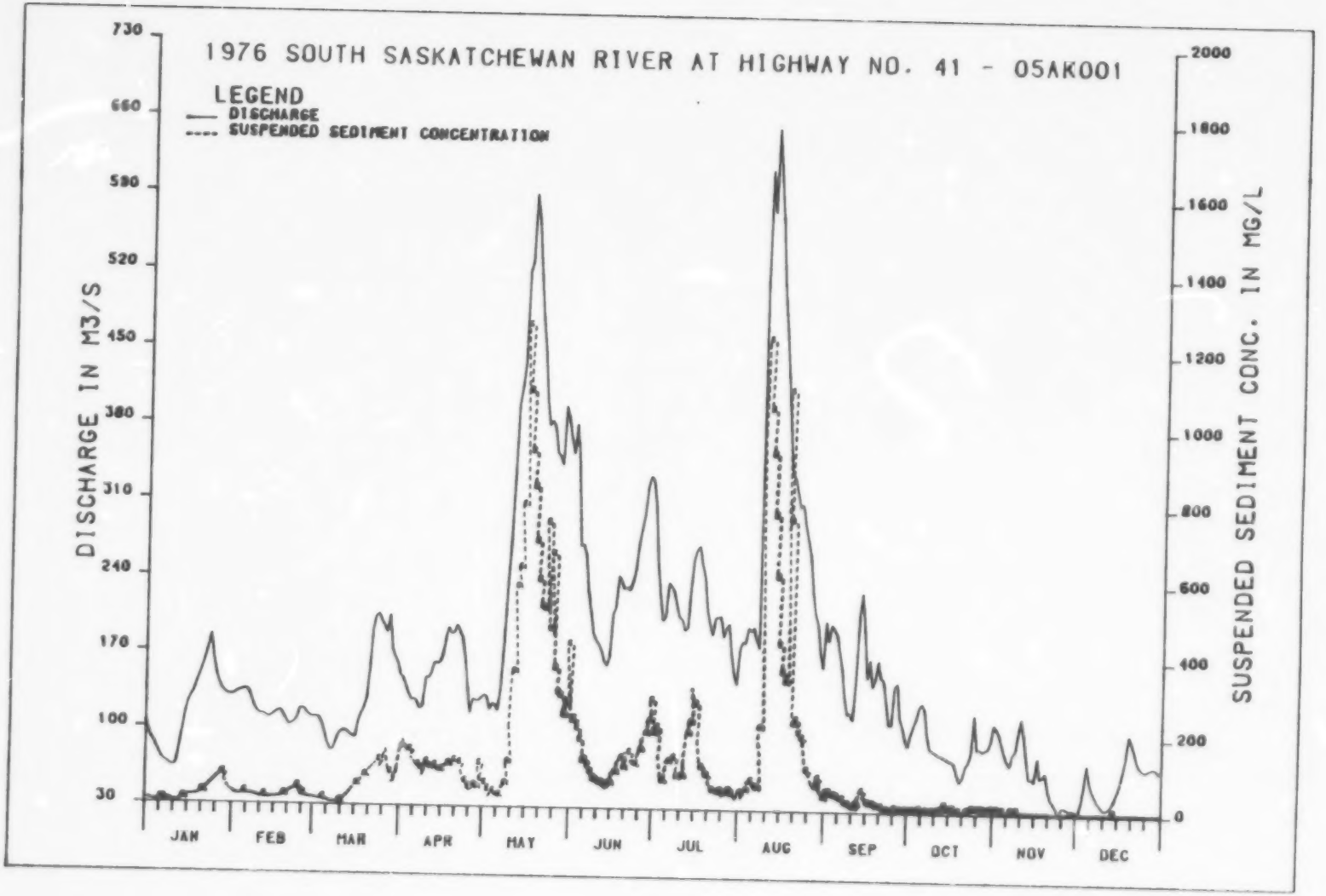

1981 SOUTH SASKATCHEWAN RIVER AT HIGHWAY NO. 41 - 05AK001
LEGEND
DISCHARGE
SUSPENDED SEDIMENT CONCENTRATION
DISCHARGE IN M3/S
SUSPENDED SEDIMENT CONC. IN MG/L
2000
1800
1600
1400
1200
1000
800
600
400
200
0
5000
4500
4000
3500
3000
2500
2000
1500
1000
500
0
JAN
FEB
MAR
APR
MAY
JUN
JUL
AUG
SEP
OCT
NOV
DEC

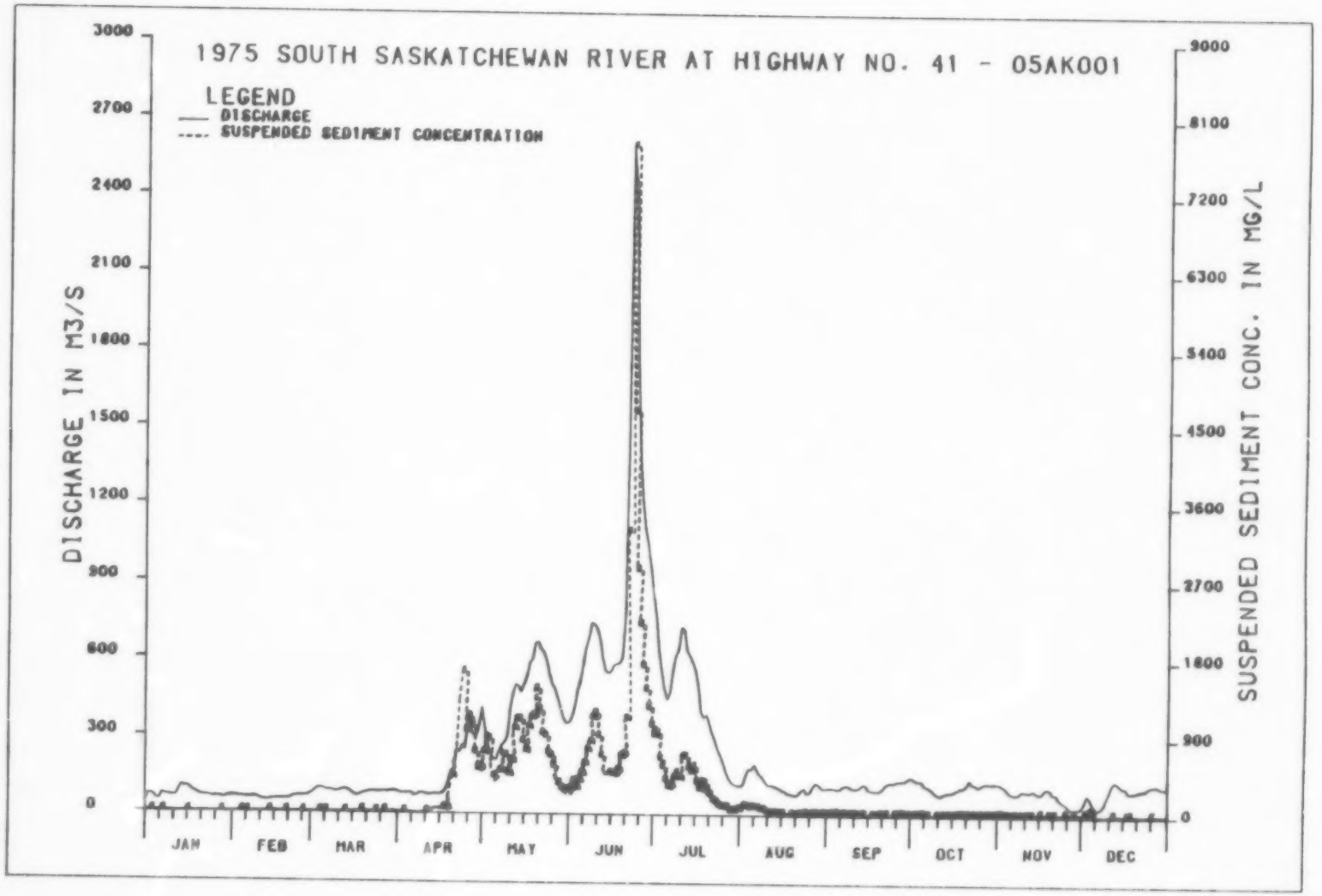

1980 SOUTH SASKATCHEWAN RIVER AT HIGHWAY NO. 41 - 05AK001
LEGEND
DISCHARGE
SUSPENDED SEDIMENT CONCENTRATION
DISCHARGE IN M3/S
SUSPENDED SEDIMENT CONC. IN MG/L
2000
1800
1600
1400
1200
1000
800
600
400
200
0
5000
4500
4000
3500
3000
2500
2000
1500
1000
500
0
JAN
FEB
MAR
APR
MAY
JUN
JUL
AUG
SEP
OCT
NOV
DEC

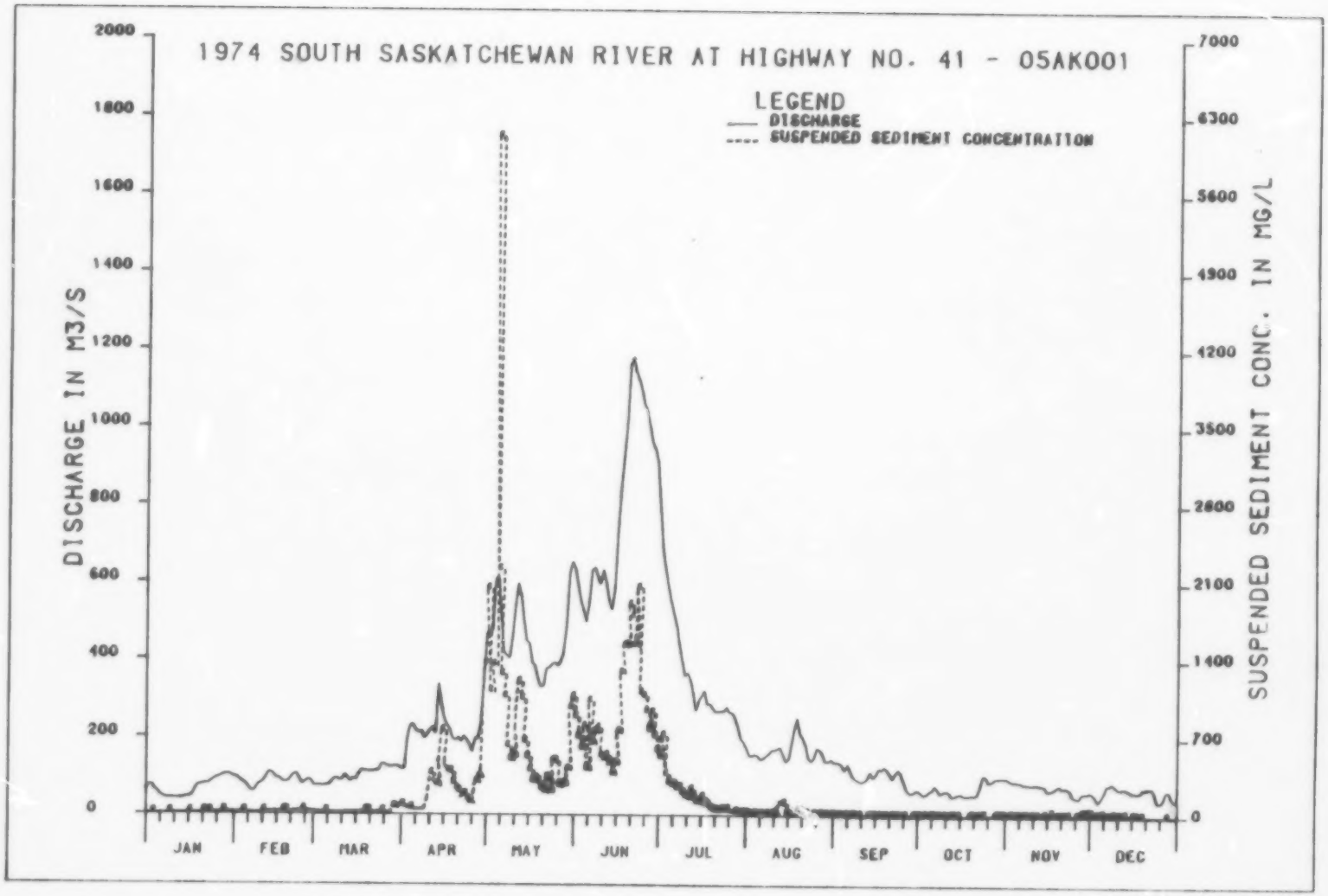

1979 SOUTH SASKATCHEWAN RIVER AT HIGHWAY NO. 41 - 05AK001
LEGEND
DISCHARGE
SUSPENDED SEDIMENT CONCENTRATION
DISCHARGE IN M3/S
710
640
570
500
430
360
290
220
150
80
10
SUSPENDED SEDIMENT CONC. IN MG/L
2000
1800
1600
1400
1200
1000
800
600
400
200
0
JAN
FEB
MAR
APR
MAY
JUN
JUL
AUG
SEP
OCT
NOV
DEC

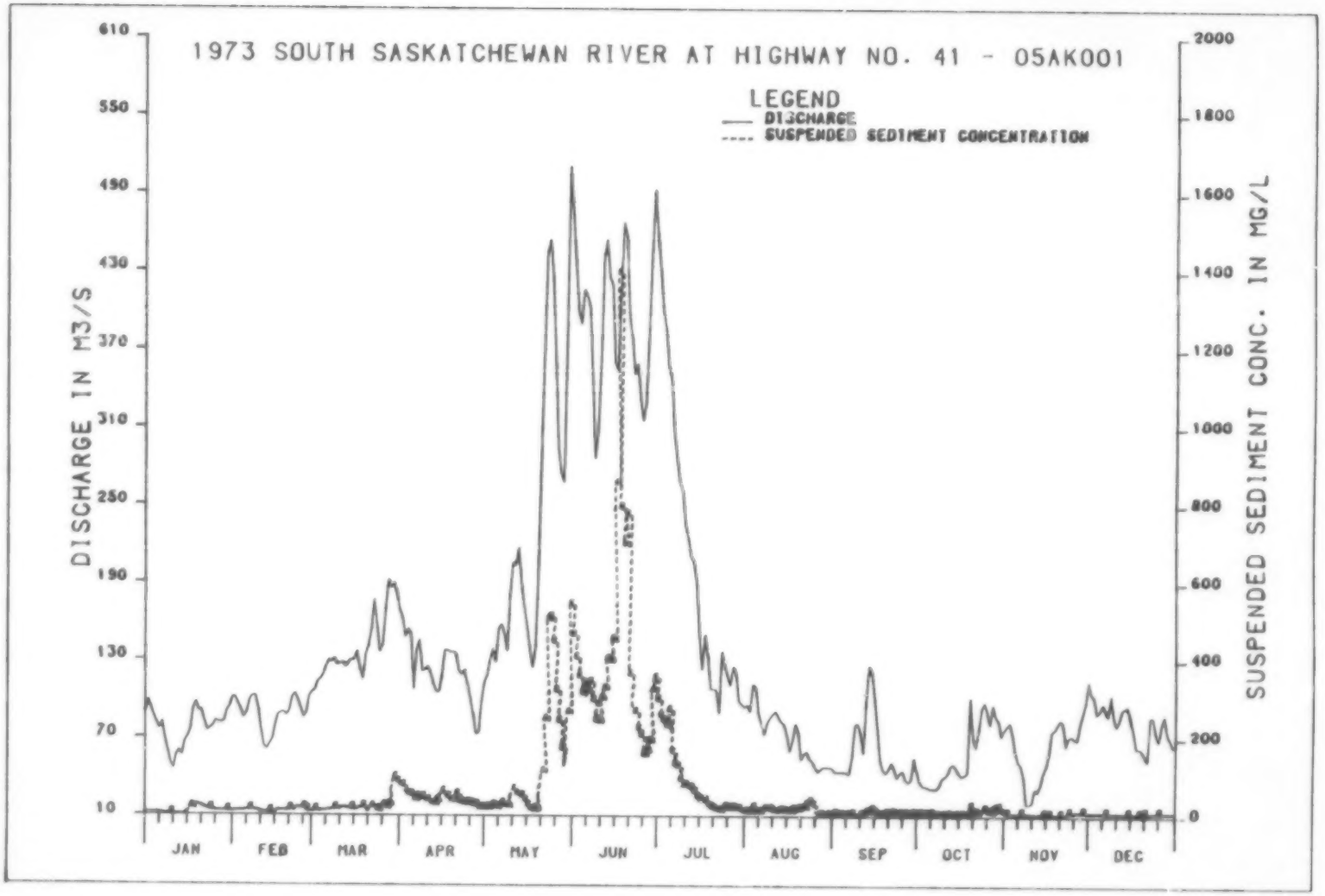

1978 SOUTH SASKATCHEWAN RIVER AT HIGHWAY NO. 41 - 05AK001
LEGEND
DISCHARGE
SUSPENDED SEDIMENT CONCENTRATION
DISCHARGE IN M3/S
SUSPENDED SEDIMENT CONC. IN MG/L
830
750
670
590
510
430
350
270
190
110
30
3000
2700
2400
2100
1800
1500
1200
900
600
300
0
JAN
FEB
MAR
APR
MAY
JUN
JUL
AUG
SEP
OCT
NOV
DEC

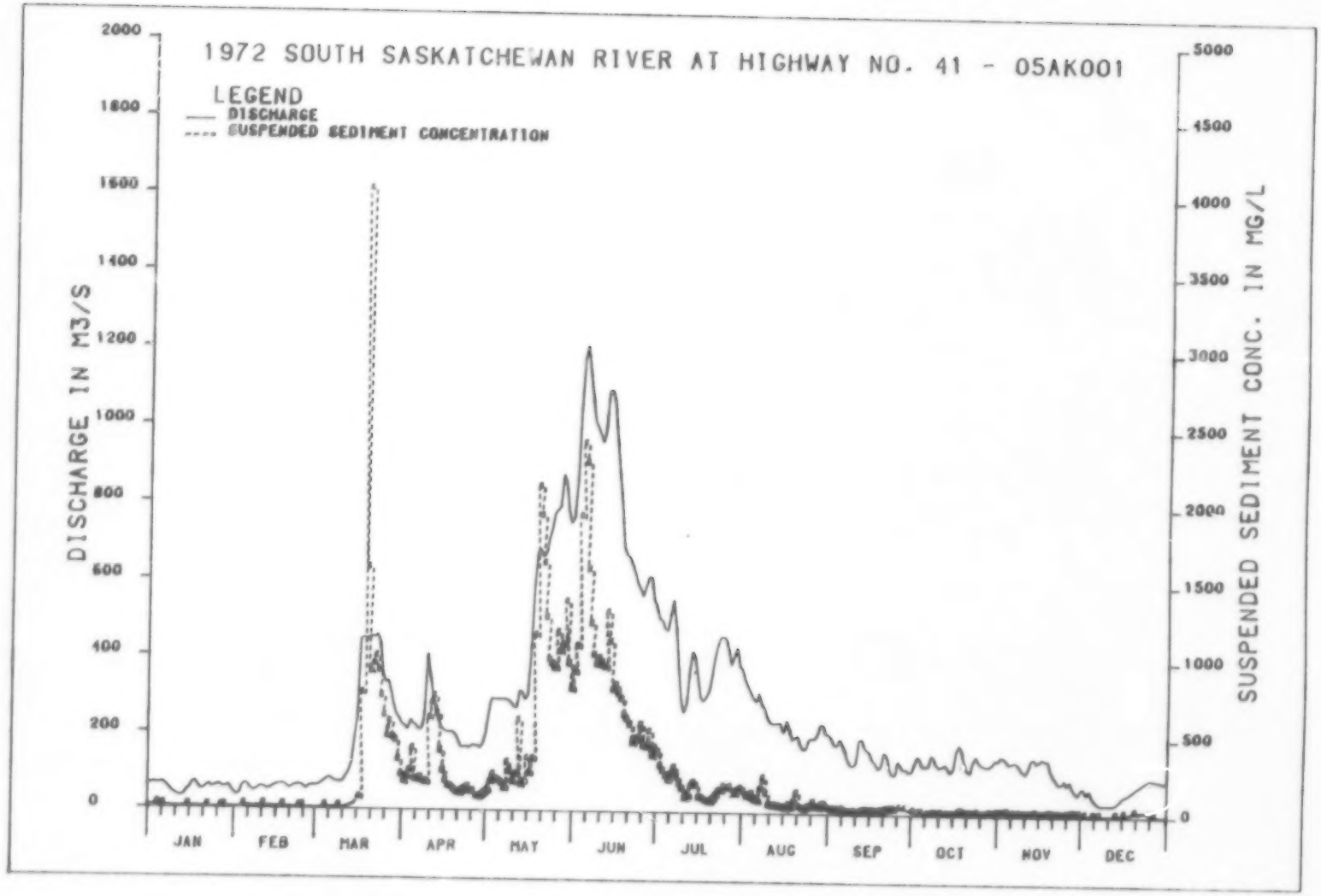

1977 SOUTH SASKATCHEWAN RIVER AT HIGHWAY NO. 41 - 05AK001
LEGEND
DISCHARGE
SUSPENDED SEDIMENT CONCENTRATION
DISCHARGE IN M3/S
SUSPENDED SEDIMENT CONC. IN MG/L
210
190
170
150
130
110
90
70
50
30
10
2000
1800
1600
1400
1200
1000
800
600
400
200
0
JAN
FEB
MAR
APR
MAY
JUN
JUL
AUG
SEP
OCT
NOV
DEC

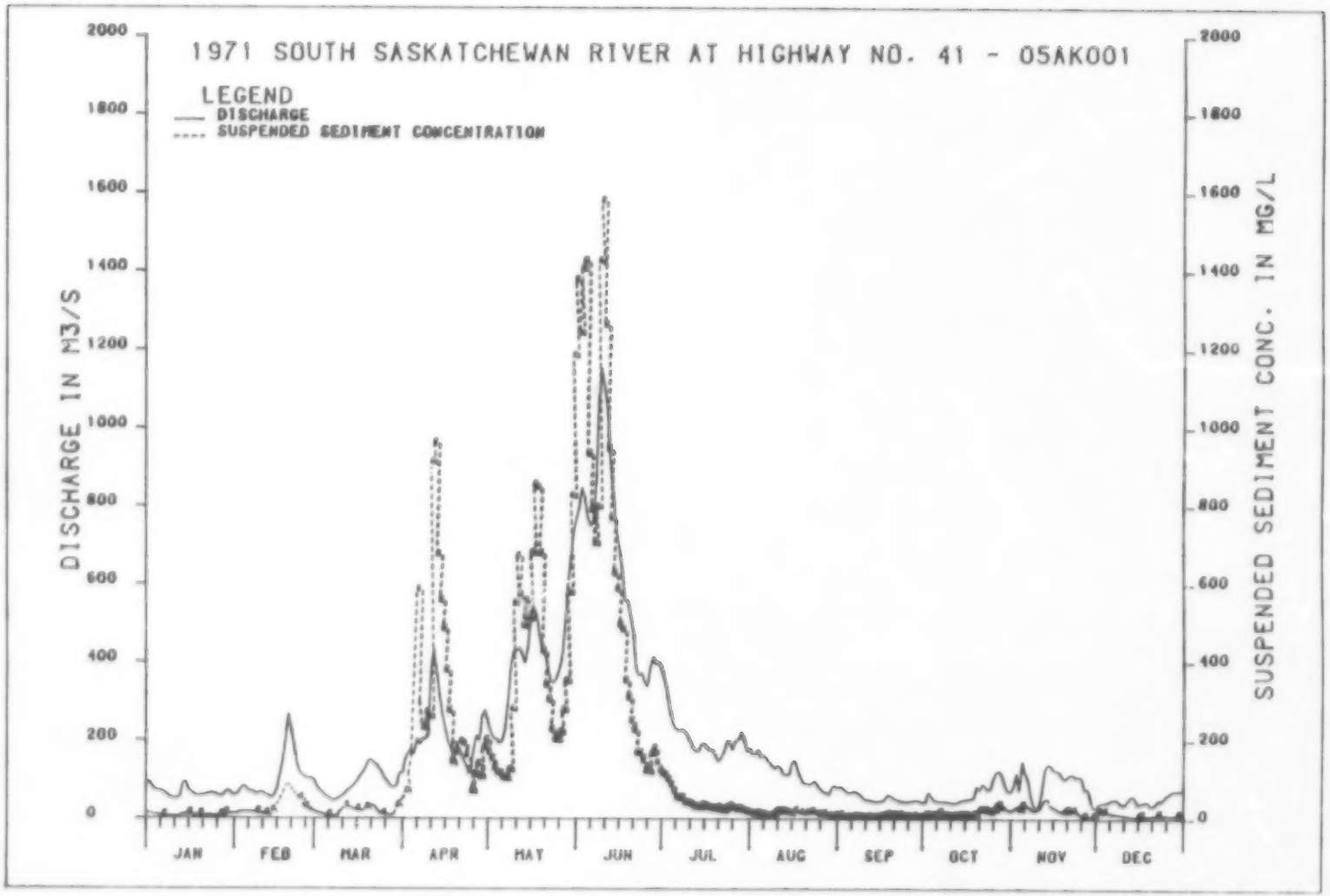

1976 SOUTH SASKATCHEWAN RIVER AT HIGHWAY NO. 41 - 05AK001
LEGEND
DISCHARGE
SUSPENDED SEDIMENT CONCENTRATION
DISCHARGE IN M3/S
730
660
590
520
450
380
310
240
170
100
30
SUSPENDED SEDIMENT CONC. IN MG/L
2000
1800
1600
1400
1200
1000
800
600
400
200
0
JAN
FEB
MAR
APR
MAY
JUN
JUL
AUG
SEP
OCT
NOV
DEC

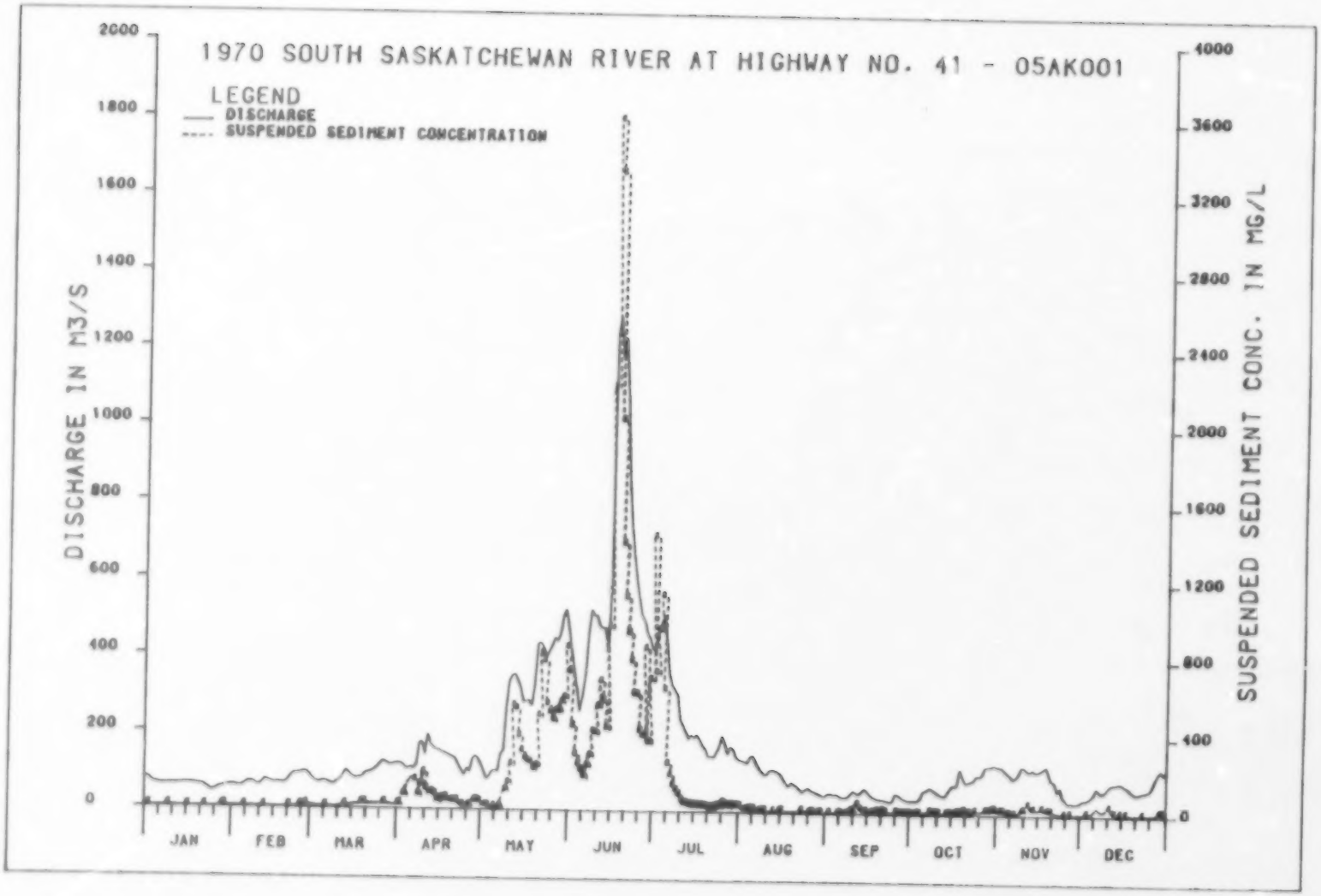

1975 SOUTH SASKATCHEWAN RIVER AT HIGHWAY NO. 41 - 05AK001
LEGEND
DISCHARGE
SUSPENDED SEDIMENT CONCENTRATION
DISCHARGE IN M3/S
SUSPENDED SEDIMENT CONC. IN MG/L
3000
2700
2400
2100
1800
1500
1200
900
600
300
0
9000
8100
7200
6300
5400
4500
3600
2700
1800
900
0
JAN
FEB
MAR
APR
MAY
JUN
JUL
AUG
SEP
OCT
NOV
DEC

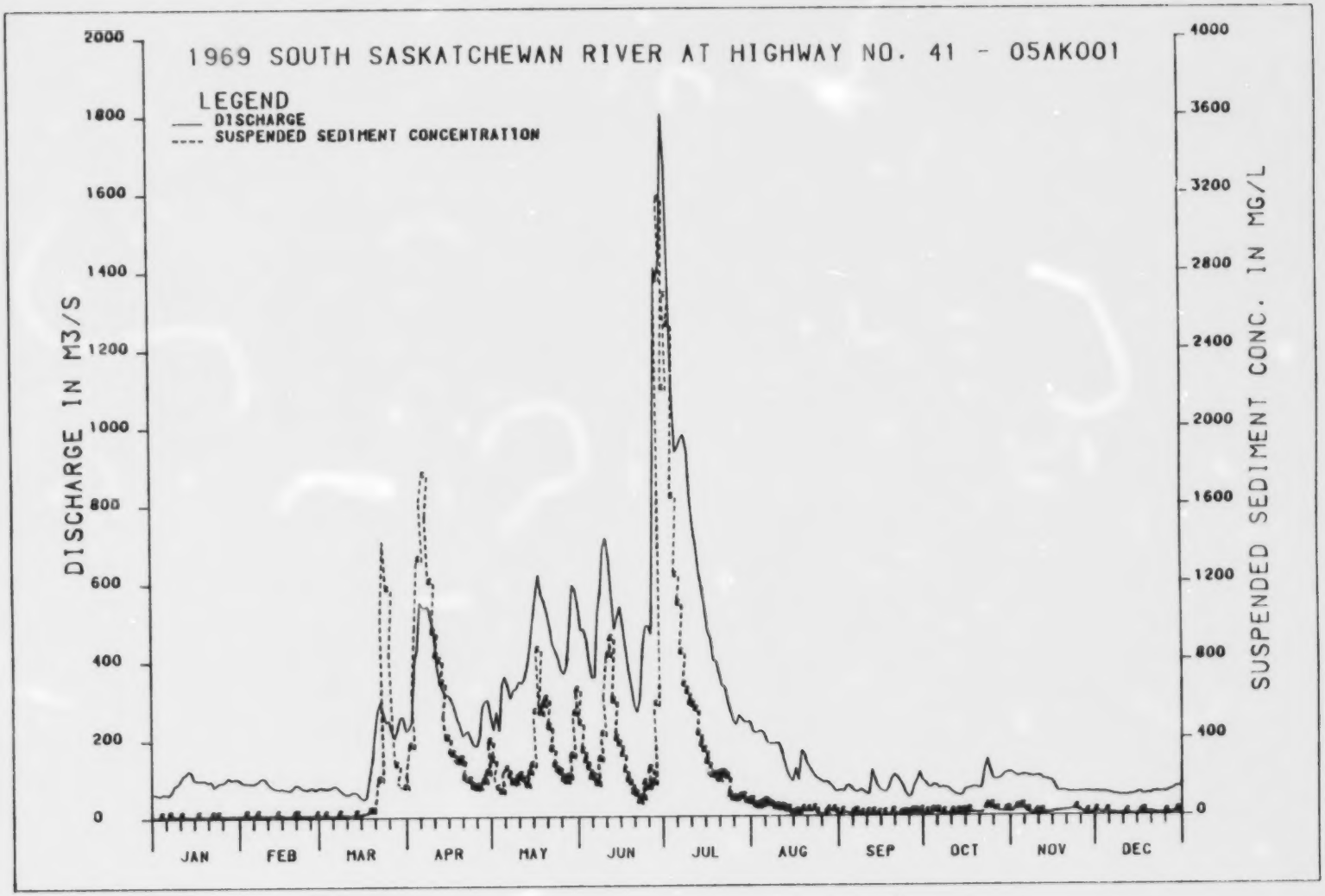

1974 SOUTH SASKATCHEWAN RIVER AT HIGHWAY NO. 41 - 05AK001
LEGEND
DISCHARGE
SUSPENDED SEDIMENT CONCENTRATION
DISCHARGE IN M3/S
SUSPENDED SEDIMENT CONC. IN MG/L
2000
1800
1600
1400
1200
1000
800
600
400
200
0
7000
6300
5600
4900
4200
3500
2800
2100
1400
700
0
JAN
FEB
MAR
APR
MAY
JUN
JUL
AUG
SEP
OCT
NOV
DEC

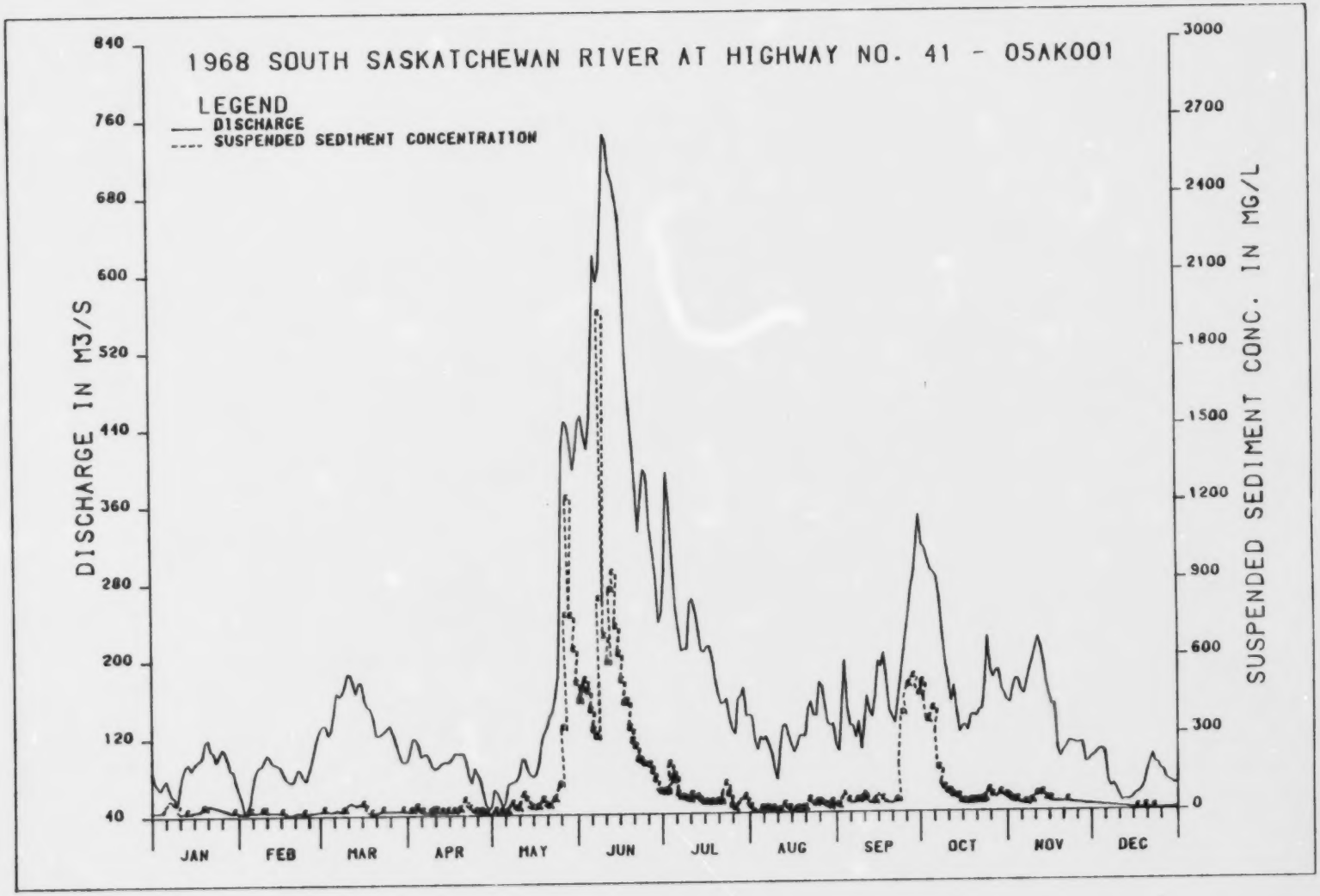

1973 SOUTH SASKATCHEWAN RIVER AT HIGHWAY NO. 41 - 05AK001
LEGEND
DISCHARGE
SUSPENDED SEDIMENT CONCENTRATION
DISCHARGE IN M3/S
610
550
490
430
370
310
250
190
130
70
10
SUSPENDED SEDIMENT CONC. IN MG/L
2000
1800
1600
1400
1200
1000
800
600
400
200
0
JAN
FEB
MAR
APR
MAY
JUN
JUL
AUG
SEP
OCT
NOV
DEC

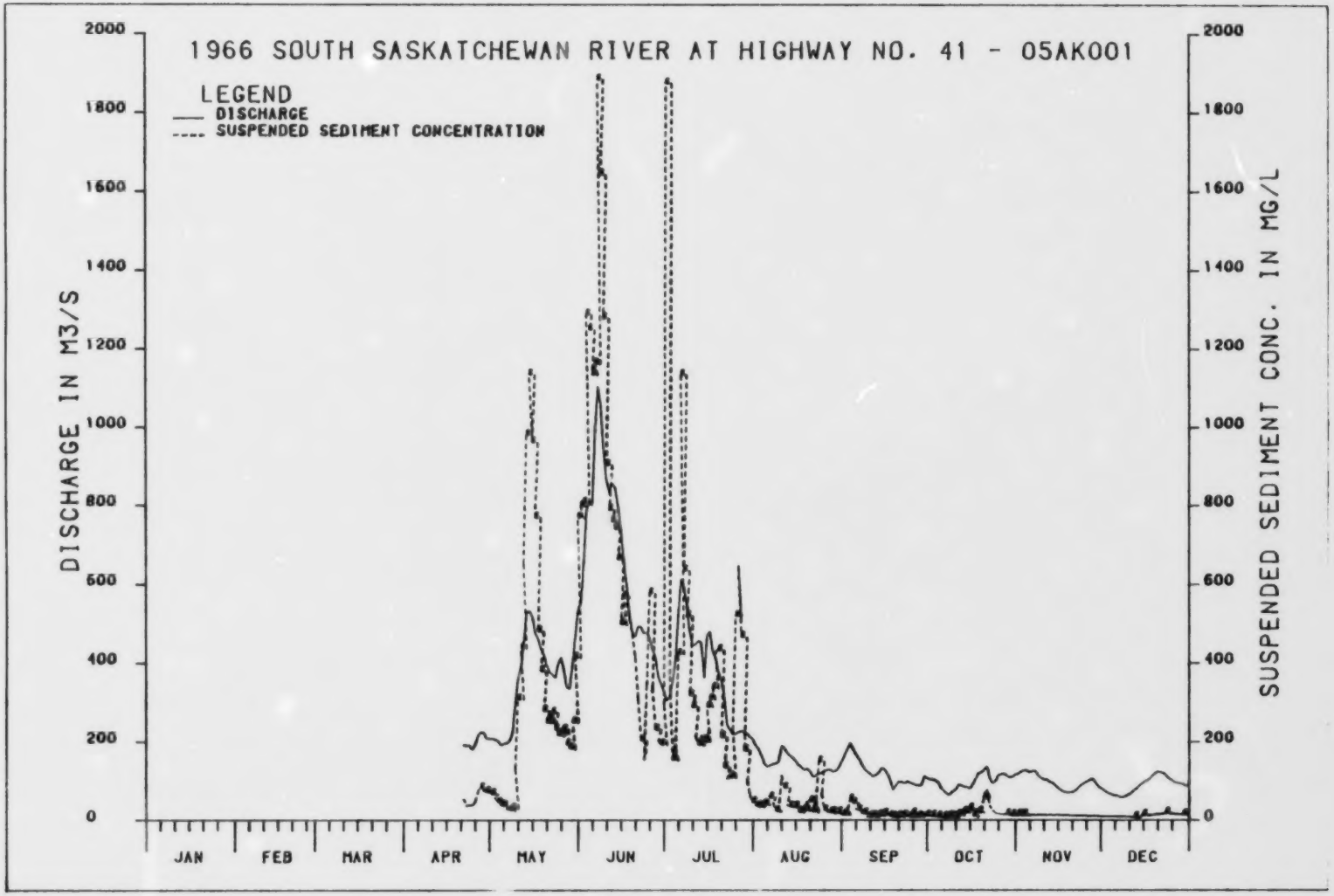

1972 SOUTH SASKATCHEWAN RIVER AT HIGHWAY NO. 41 - 05AK001
LEGEND
DISCHARGE
SUSPENDED SEDIMENT CONCENTRATION
DISCHARGE IN M3/S
SUSPENDED SEDIMENT CONC. IN MG/L
2000
1800
1600
1400
1200
1000
800
600
400
200
0
5000
4500
4000
3500
3000
2500
2000
1500
1000
500
0
JAN
FEB
MAR
APR
MAY
JUN
JUL
AUG
SEP
OCT
NOV
DEC


1971 SOUTH SASKATCHEWAN RIVER AT HIGHWAY NO. 41 - 05AK001
LEGEND
DISCHARGE
SUSPENDED SEDIMENT CONCENTRATION
DISCHARGE IN M3/S
SUSPENDED SEDIMENT CONC. IN MG/L
0
200
400
600
800
1000
1200
1400
1600
1800
2000
JAN
FEB
MAR
APR
MAY
JUN
JUL
AUG
SEP
OCT
NOV
DEC


1970 SOUTH SASKATCHEWAN RIVER AT HIGHWAY NO. 41 - 05AK001
LEGEND
DISCHARGE
SUSPENDED SEDIMENT CONCENTRATION
DISCHARGE IN M3/S
SUSPENDED SEDIMENT CONC. IN MG/L
2000
1800
1600
1400
1200
1000
800
600
400
200
0
4000
3600
3200
2800
2400
2000
1600
1200
800
400
0
JAN
FEB
MAR
APR
MAY
JUN
JUL
AUG
SEP
OCT
NOV
DEC


1969 SOUTH SASKATCHEWAN RIVER AT HIGHWAY NO. 41 - 05AK001
LEGEND
DISCHARGE
SUSPENDED SEDIMENT CONCENTRATION
DISCHARGE IN M3/S
SUSPENDED SEDIMENT CONC. IN MG/L
2000
1800
1600
1400
1200
1000
800
600
400
200
0
4000
3600
3200
2800
2400
2000
1600
1200
800
400
0
JAN
FEB
MAR
APR
MAY
JUN
JUL
AUG
SEP
OCT
NOV
DEC


1968 SOUTH SASKATCHEWAN RIVER AT HIGHWAY NO. 41 - 05AK001
LEGEND
DISCHARGE
SUSPENDED SEDIMENT CONCENTRATION
DISCHARGE IN M3/S
840
760
680
600
520
440
360
280
200
120
40
SUSPENDED SEDIMENT CONC. IN MG/L
3000
2700
2400
2100
1800
1500
1200
900
600
300
0
JAN
FEB
MAR
APR
MAY
JUN
JUL
AUG
SEP
OCT
NOV
DEC


1966 SOUTH SASKATCHEWAN RIVER AT HIGHWAY NO. 41 - 05AK001
LEGEND
DISCHARGE
SUSPENDED SEDIMENT CONCENTRATION
DISCHARGE IN M3/S
SUSPENDED SEDIMENT CONC. IN MG/L
0
200
400
600
800
1000
1200
1400
1600
1800
2000
JAN
FEB
MAR
APR
MAY
JUN
JUL
AUG
SEP
OCT
NOV
DEC

APPENDIX D

POINT-INTEGRATING PARTICLE SIZE DATA

Point-integrating data for thirteen measurements during the period 1966 to 1971 are included. Point integrating measurements were not taken after June 1971.

SOUTH SASKATCHEWAN RIVER AT HIGHWAY NO. 41 STATION NO. 05AK001

POIN. INTEGRATING PARTICLE-SIZE ANALYSIS OF SUSPENDED SEDIMENT FOR 1966

DATE	TIME	WATER TEMP. (C)	PANEL DISCHARGE (M3/S)	SAMPLING VERTICAL (M)	DEPTH OF SAMPLE (M)	CONCENT. OF SAMPLE (MG/L)	DISSOLVED SOLIDS (MG/L)	PERCENT FINER THAN INDICATED SIZE, IN MILLIMETRES .002	.004	.008	.016	.031	.062	.125	.250	.500	1.00	2.00	PERCENT SAND	SILT	CLAY
MAY 14	16:00	12.2		158	5.09			STREAMBED													
MAY 14	16:05	12.2	161	158	4.60	1100	220	15	25	39	56	68	86	96	99	100			14	61	25
MAY 14	16:10	12.2	161	158	4.08	1090	211	14	22	35	52	72	88	97	100				12	66	22
MAY 14	16:15	12.2	161	158	3.05	1050	218	13	21	34	51	71	88	97	99	100			12	67	21
MAY 14	16:20	12.2	161	158	1.52	998	209	14	20	32	53	75	91	99	100				9	71	20
MAY 14	16:25	12.2	161	158	0.09	908	199	13	21	36	56	78	94	99	100				6	73	21
MAY 14	16:30	12.2		122	4.08			STREAMBED													
MAY 14	16:35	12.2	109	122	3.60	2570	210	7	9	14	22	29	36	50	68	82	91	100	64	27	9
MAY 14	16:40	12.2	109	122	3.26	1410	210	13	18	28	41	54	66	76	86	93	96	100	34	48	18
MAY 14	16:45	12.2	109	122	2.44	1170	206	16	21	32	48	64	78	87	93	96	98	100	22	57	21
MAY 14	16:50	12.2	109	122	1.44	1020	211	12	20	33	50	70	87	93	97	99	100		13	67	20
MAY 14	17:00	12.2	109	122	0.09	1240	203	16	20	31	45	60	71	77	83	90	95	100	29	51	20
MAY 14	17:05			113	3.47			STREAMBED													
MAY 14	17:10	12.2	75.7	113	3.29	1240	217	12	19	29	44	59	72	80	93	96	98	100	28	53	19
MAY 14	17:15	12.2	75.7	113	2.77	1200	214	10	19	31	44	62	74	82	90	93	96	100	26	55	19
MAY 14	17:20	12.2	75.7	113	2.07	1120	214	7	12	37	45	63	77	86	92	96	98	100	23	65	12
MAY 14	17:25	12.2	75.7	113	1.04	1010	211	15	19	35	53	73	87	93	98	100			13	68	19
MAY 14	17:30	12.2	75.7	113	0.09	942	204	16	26	40	57	75	90	97	99	100			10	64	26
MAY 14	17:35			91.4	3.60			STREAMBED													
MAY 14	17:40	12.2	107	91.4	3.35	1410	210	14	17	29	42	56	70	80	88	94	96	100	30	53	17
MAY 14	17:45	12.2	107	91.4	2.87	1270	202	15	19	30	45	61	75	83	90	93	95	100	25	56	19
MAY 14	17:50	12.2	107	91.4	2.16	1120	209	17	23	34	50	67	82	92	97	99	100		18	59	23
MAY 14	17:55	12.2	107	91.4	1.07	1040	206	15	25	38	54	73	88	95	98	99	99	100	12	63	25
MAY 14	18:00	12.2	107	91.4	0.09	964	207	17	27	40	59	77	91	98	100				9	64	27
MAY 14	18:15			61.0	3.02			STREAMBED													
MAY 14	18:20	12.2	117	61.0	2.77	1550	214	10	17	26	38	51	66	86	96	98	99	100	34	49	17
MAY 14	18:25	12.2	117	61.0	2.48	1360	214	12	18	27	41	56	73	88	97	99	100		27	55	18
MAY 14	18:30	12.2	117	61.0	1.52	1210	208	17	21	33	47	64	81	95	100				19	60	21
MAY 14	18:35	12.2	117	61.0	0.09	944	198	18	27	40	58	77	92	98	100				8	65	27

(CONTINUED)

SOUTH SASKATCHEWAN RIVER AT HIGHWAY NO. 41

STATION NO. 05AK001

(CONTINUED)

POINT INTEGRATING PARTICLE-SIZE ANALYSIS OF SUSPENDED SEDIMENT FOR 1966

DATE	TIME	WATER TEMP. (C)	PANEL DISCHARGE (M3/S)	SAMPLING VERTICAL (M)	DEPTH OF SAMPLE (M)	CONCENT. OF SAMPLE (MG/L)	DISSOLVED SOLIDS (MG/L)	PERCENT FINER THAN INDICATED SIZE, IN MILLIMETRES .002	.004	.008	.016	.031	.062	.125	.250	.500	1.00	2.00	PERCENT SAND	SILT	CLAY
JUN 08	16:30	14.4	148	174	0.09	1820	208	21	28	44	60	78	94	99	100				6	66	28
JUN 08	16:35	14.4	148	174	1.22	1970	226	17	26	40	57	76	92	99	100				8	66	26
JUN 08	16:40	14.4	148	174	2.44	1980	202	18	27	40	56	74	91	99	100				9	64	27
JUN 08	16:45	14.4	148	174	3.26	2080	206	15	24	35	52	73	90	98	100				10	66	24
JUN 08	16:50	14.4	148	174	3.99	2070	195	16	25	38	54	71	89	98	100				11	64	25
JUN 08	16:51	14.4		174	4.08			STREAMBED													
JUN 08	17:05	14.4	250	146	0.09	1850	196	19	28	41	60	79	93	99	100				7	65	28
JUN 08	17:10	14.4	250	146	1.77	2110	191	18	27	39	55	72	87	97	99	100			13	60	27
JUN 08	17:20	14.4	250	146	3.51	2200	196	17	26	38	54	70	85	95	99	100			15	59	26
JUN 08	17:25	14.4	250	146	4.69	2220	200	16	24	35	50	67	82	93	98	100			18	58	24
JUN 08	17:30	14.4	250	146	5.58	2410	193	14	21	32	46	62	79	93	99	100			21	58	21
JUN 08	17:31	14.4		146	5.85			STREAMBED													
JUN 08	17:40	14.4	304	113	0.09	2000	201	15	24	36	54	73	91	98	100				9	67	24
JUN 08	17:50	14.4	304	113	1.66	2060	191	17	25	37	54	71	87	96	99	100			13	62	25
JUN 08	18:00	14.4	304	113	3.29	2160	194	18	25	36	52	68	84	95	99	100			16	59	25
JUN 08	18:10	14.4	304	113	4.39	2220	230	14	22	34	49	66	83	95	99	100			17	61	22
JUN 08	18:15	14.4	304	113	5.03	3440	200	8	15	22	32	42	53	65	77	88	95	100	47	38	15
JUN 08	18:16	14.4		113	5.85			STREAMBED													
JUN 08	18:25	14.4	244	82.3	0.09	2000	193	17	26	38	55	75	90	97	99	100			10	64	26
JUN 08	18:30	14.4	244	82.3	1.34	2330	196	16	24	35	49	63	80	92	97	100			20	56	24
JUN 08	18:40	14.4	244	82.3	2.68	2470	192	13	21	32	45	60	76	88	96	99	100		24	55	21
JUN 08	18:50	14.4	244	82.3	3.60	2740	215	14	19	29	41	54	70	86	96	100			30	51	19
JUN 08	19:00	14.4	244	82.3	4.32	3410	217	8	13	20	32	43	56	71	83	90	94	100	44	43	13
JUN 08	19:01	14.4		82.3	4.48			STREAMBED													
JUN 08	19:15	14.4	200	54.9	0.09	1900	207	19	28	42	59	76	92	97	98	99	100		8	64	28
JUN 08	19:20	14.4	200	54.9	0.94	2230	210	15	24	36	52	67	82	92	98	99	100		18	58	24
JUN 08	19:30	14.4	200	54.9	1.89	2350	211	12	20	30	45	60	75	86	93	97	99	100	25	55	20
JUN 08	19:40	14.4	200	54.9	2.50	2760	212	12	17	26	39	53	68	83	92	97	99	100	32	51	17
JUN 08	19:50	14.4	200	54.9	2.97	3000	209	11	15	24	35	48	62	75	87	93	96	100	38	47	15
JUN 08	19:51	14.4		54.9	3.14			STREAMBED													

SOUTH SASKATCHEWAN RIVER AT HIGHWAY NO. 41 STATION NO. 05AK001

POINT INTEGRATING PARTICLE-SIZE ANALYSIS OF SUSPENDED SEDIMENT FOR 1967

DATE	TIME	WATER TEMP. (C)	PANEL DISCHARGE (M3/S)	SAMPLING VERTICAL (M)	DEPTH OF SAMPLE (M)	CONCENT. OF SAMPLE (MG/L)	DISSOLVED SOLIDS (MG/L)	PERCENT FINER THAN INDICATED SIZE, IN MILLIMETRES .002	.004	.008	.016	.031	.062	.125	.250	.500	1.00	2.00	PERCENT SAND	SILT	CLAY
MAY 04	13:00	6.7	31.8	160	0.15	240	303	50	61	80	91	97	99	100					1	38	61
MAY 04	13:05	6.7	31.8	160	1.19	248	300	52	64	80	92	97	99	100					1	35	64
MAY 04	13:10	6.7	31.8	160	2.38	260	297	54	65	80	91	96	98	100					2	33	65
MAY 04	13:15	6.7	31.8	160	3.17	249	301	52	60	78	91	96	99	100					1	39	60
MAY 04	13:20	6.7	31.8	160	3.91	260	303	51	62	78	89	95	98	99	100				2	36	62
MAY 04	13:21	6.7		160	3.96			STREAMBED													
MAY 04	13:30	6.7	43.7	134	0.15	241	296	54	65	79	92	97	99	99	100				1	34	65
MAY 04	13:35	6.7	43.7	134	1.04	249	289	53	64	80	92	97	99	100					1	35	64
MAY 04	13:40	6.7	43.7	134	2.04	257	290	52	64	77	91	95	97	98	100				3	33	64
MAY 04	13:45	6.7	43.7	134	2.74	256	299	54	65	79	91	96	97	99	100				3	32	65
MAY 04	13:50	6.7	43.7	134	3.26	254	297	49	60	76	89	93	96	98	99	100			4	36	60
MAY 04	13:51	6.7		134	3.41			STREAMBED													
MAY 04	14:00	6.7	41.0	116	0.15	241	295	51	61	75	89	94	97	99	100				3	36	61
MAY 04	14:05	6.7	41.0	116	1.28	264	293	48	60	76	87	93	95	96	99	100			5	35	60
MAY 04	14:10	6.7	41.0	116	2.04	271	297	44	56	74	84	88	91	93	97	98	99	100	9	35	56
MAY 04	14:15	6.7	41.0	116	2.41	327	299	38	48	62	70	74	76	78	93	99	100		24	28	48
MAY 04	14:16	6.7		116	2.56			STREAMBED													
MAY 04	14:30	6.7	35.5	94.5	0.15	261	302	51	63	80	91	96	98	99	100				2	35	63
MAY 04	14:35	6.7	35.5	94.5	1.07	253	299	46	57	73	86	91	94	97	98	99	100		6	37	57
MAY 04	14:40	6.7	35.5	94.5	1.68	278	293	46	57	73	84	92	94	98	100				6	37	57
MAY 04	14:45	6.7	35.5	94.5	2.41	315	298	40	50	61	70	74	76	78	86	94	96	100	24	26	50
MAY 04	14:46	6.7		94.5	2.56			STREAMBED													
MAY 04	15:00	6.7	40.3	70.1	0.15	251	294	48	59	77	91	97	99	100					1	40	59
MAY 04	15:05	6.7	40.3	70.1	0.94	256	301	49	61	78	89	95	97	99	100				3	36	61
MAY 04	15:20	6.7	40.3	70.1	1.52	264	304	52	62	77	88	93	95	97	98	100			5	33	62
MAY 04	15:30	6.7	40.3	70.1	1.74	277	300	45	55	71	82	86	90	93	97	99	100		10	35	55
MAY 04	15:31	6.7		70.1	1.89			STREAMBED													

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SOUTH SASKATCHEWAN RIVER AT HIGHWAY NO. 41

STATION NO. 05AK001

(CONTINUED)

POINT INTEGRATING PARTICLE-SIZE ANALYSIS OF SUSPENDED SEDIMENT FOR 1967

DATE	TIME	WATER TEMP. (C)	PANEL DISCHARGE (M3/S)	SAMPLING VERTICAL (M)	DEPTH OF SAMPLE (M)	CONCENT. OF SAMPLE (MG/L)	DISSOLVED SOLIDS (MG/L)	PERCENT FINER THAN INDICATED SIZE, IN MILLIMETRES	PERCENT SAND SILT CLAY
								.002 .004 .008 .016 .031 .062 .125 .250 .500 1.00 2.00	
MAY 12	17:00	7.8	131	168	0.15	3150	351	DATA NOT AVAILABLE	
MAY 12	17:05E	7.8	131	168	0.15	3120		DATA NOT AVAILABLE	
MAY 12	17:10E	7.8	131	168	0.91	3180	355	DATA NOT AVAILABLE	
MAY 12	17:15E	7.8	131	168	0.91	3200		DATA NOT AVAILABLE	
MAY 12	17:20E	7.8	131	168	1.34	3200	348	DATA NOT AVAILABLE	
MAY 12	17:25E	7.8	131	168	1.34	3190		DATA NOT AVAILABLE	
MAY 12	17:30E	7.8	131	168	2.71	3220	349	DATA NOT AVAILABLE	
MAY 12	17:35E	7.8	131	168	2.71	3260		DATA NOT AVAILABLE	
MAY 12	17:40E	7.8	131	168	3.63	3330	346	DATA NOT AVAILABLE	
MAY 12	17:50E	7.8	131	168	3.63	3310		DATA NOT AVAILABLE	
MAY 12	18:00E	7.8	131	168	4.39	3190	342	DATA NOT AVAILABLE	
MAY 12	18:05E	7.8	131	168	4.39	3330		DATA NOT AVAILABLE	
MAY 12	18:06E	7.8		168	4.54			STREAMBED	
MAY 12	18:20	7.8	145	140	0.15	3070	338	DATA NOT AVAILABLE	
MAY 12	18:25E	7.8	145	140	0.98	3180	338	DATA NOT AVAILABLE	
MAY 12	18:30E	7.8	145	140	1.46	3180	345	DATA NOT AVAILABLE	
MAY 12	18:35E	7.8	145	140	2.93	3230	353	DATA NOT AVAILABLE	
MAY 12	18:40E	7.8	145	140	3.90	3300	346	DATA NOT AVAILABLE	
MAY 12	18:45E	7.8	145	140	4.73	3440	357	DATA NOT AVAILABLE	
MAY 12	18:50E	7.8	145	140	4.73	3360		DATA NOT AVAILABLE	
MAY 12	18:51E	7.8		140	4.88			STREAMBED	
MAY 12	19:25E	7.8	151	113	0.15	3030	352	DATA NOT AVAILABLE	
MAY 12	19:30E	7.8	151	113	0.73	3170	351	DATA NOT AVAILABLE	
MAY 12	19:35E	7.8	151	113	1.10	3220	350	DATA NOT AVAILABLE	
MAY 12	19:40E	7.8	151	113	2.19	3330	349	DATA NOT AVAILABLE	
MAY 12	19:45E	7.8	151	113	2.93	3550	344	DATA NOT AVAILABLE	
MAY 12	19:50E	7.8	151	113	3.51	3460	343	DATA NOT AVAILABLE	
MAY 12	20:10E	7.8	151	113	3.51	3500		DATA NOT AVAILABLE	
MAY 12	20:11E	7.8		113	3.66			STREAMBED	

NOTE :

TIME SYMBOL: E - ESTIMATED

(CONTINUED)

SOUTH SASKATCHEWAN RIVER AT HIGHWAY NO. 41

STATION NO. 05AK001

(CONTINUED)

POINT INTEGRATING PARTICLE-SIZE ANALYSIS OF SUSPENDED SEDIMENT FOR 1967

DATE	TIME	WATER TEMP. (C)	PANEL DISCHARGE (M3/S)	SAMPLING VERTICAL (M)	DEPTH OF SAMPLE (M)	CONCENT. OF SAMPLE (MG/L)	DISSOLVED SOLIDS (MG/L)	PERCENT FINER THAN INDICATED SIZE, IN MILLIMETRES .002 .004 .008 .016 .031 .062 .125 .250 .500 1.00 2.00	PERCENT SAND SILT CLAY
MAY 13	08:40	7.8	136	88.4	0.15	2430	309	DATA NOT AVAILABLE	
MAY 13	08:50E	7.8	136	88.4	0.15	2400		DATA NOT AVAILABLE	
MAY 13	09:00E	7.8	136	88.4	0.82	2570	309	DATA NOT AVAILABLE	
MAY 13	09:10E	7.8	136	88.4	0.82	2540		DATA NOT AVAILABLE	
MAY 13	09:20E	7.8	136	88.4	1.25	2430	312	DATA NOT AVAILABLE	
MAY 13	09:25E	7.8	136	88.4	1.25	2940		DATA NOT AVAILABLE	
MAY 13	09:30E	7.8	136	88.4	2.50	2920	308	DATA NOT AVAILABLE	
MAY 13	09:35E	7.8	136	88.4	2.50	2830		DATA NOT AVAILABLE	
MAY 13	09:40E	7.8	136	88.4	3.35	2930	312	DATA NOT AVAILABLE	
MAY 13	09:45E	7.8	136	88.4	3.35	2950		DATA NOT AVAILABLE	
MAY 13	09:50E	7.8	136	88.4	4.11	3140	315	DATA NOT AVAILABLE	
MAY 13	09:55	7.8		88.4	4.17			STREAMBED	
MAY 13	10:00	7.8	142	57.9	0.15	2470	309	DATA NOT AVAILABLE	
MAY 13	10:05	7.8	142	57.9	0.61	2680	306	DATA NOT AVAILABLE	
MAY 13	10:10	7.8	142	57.9	1.37	2680	311	DATA NOT AVAILABLE	
MAY 13	10:15	7.8	142	57.9	2.19	3110	307	DATA NOT AVAILABLE	
MAY 13	10:25	7.8	142	57.9	2.68	3460	305	DATA NOT AVAILABLE	
MAY 13	10:30	7.8		57.9	2.74			STREAMBED	

NOTE :

TIME SYMBOL: E - ESTIMATED

(CONTINUED)

SOUTH SASKATCHEWAN RIVER AT HIGHWAY NO. 41 STATION NO. 05AK001

(CONTINUED)

POINT INTEGRATING PARTICLE-SIZE ANALYSIS OF SUSPENDED SEDIMENT FOR 1967

DATE	TIME	WATER TEMP. (C)	PANEL DISCHARGE (M3/S)	SAMPLING VERTICAL (M)	DEPTH OF SAMPLE (M)	CONCENT. OF SAMPLE (MG/L)	DISSOLVED SOLIDS (MG/L)	PERCENT FINER THAN INDICATED SIZE, IN MILLIMETRES .002	.004	.008	.016	.031	.062	.125	.250	.500	1.00	2.00	PERCENT SAND	SILT	CLAY
MAY 26	18:00	14.4	193	54.9	0.15	2450	194	14	23	35	50	68	89	98	100				11	66	23
MAY 26	18:05	14.4	193	54.9	0.94	2960	197	14	19	30	44	60	80	95	99	100			20	61	19
MAY 26	18:10	14.4	193	54.9	1.89	3400	196	13	18	26	38	52	72	91	98	100			28	54	18
MAY 26	18:15	14.4	193	54.9	2.50	3770	200	11	15	23	33	46	66	87	97	100			34	51	15
MAY 26	18:20	14.4	193	54.9	3.05	4430	196	9	13	20	30	41	58	80	94	99	100		42	45	13
MAY 26	18:21	14.4		54.9	3.14			STREAMBED													
MAY 26	18:35	14.4	267	82.3	0.15	2240	183	17	26	39	56	74	93	99	100				7	67	26
MAY 26	18:40	14.4	267	82.3	1.46	2780	202	13	21	32	45	62	83	96	99	100			17	62	21
MAY 26	18:45	14.4	267	82.3	2.93	3170	192	14	19	29	42	56	76	91	97	99	100		24	57	19
MAY 26	18:50	14.4	267	82.3	4.79	4360	205	9	14	21	30	41	57	74	85	92	95	100	43	43	14
MAY 26	18:51	14.4		82.3	4.88			STREAMBED													
MAY 26	19:00	14.4	311	113	0.15	2410	195	12	21	34	49	69	88	98	100				12	67	21
MAY 26	19:05	14.4	311	113	1.62	2550	193	13	21	33	49	67	85	87	100				15	64	21
MAY 26	19:10	14.4	311	113	3.26	2720	210	12	20	31	46	63	83	95	99	100			17	63	20
MAY 26	19:15	14.4	311	113	4.33	2810	225	11	18	29	43	60	79	93	98	100			21	61	18
MAY 26	19:20	14.4	311	113	5.33	3350	201	11	17	28	38	52	69	83	92	97	98	100	31	52	17
MAY 26	19:21	14.4		113	5.43			STREAMBED													
MAY 26	19:40	14.4	237	146	0.15	2490	199	15	22	35	52	69	87	98	100				13	65	22
MAY 26	19:45	14.4	237	146	1.77	2590	197	14	22	34	49	65	86	98	100				14	64	22
MAY 26	19:50	14.4	237	146	3.54	2680	195	15	23	35	49	65	86	98	100				14	63	23
MAY 26	19:55	14.4	237	146	4.69	2740	186	15	23	35	48	63	83	97	100				17	60	23
MAY 26	20:00	14.4	237	146	5.70	2920	191	13	21	32	45	61	81	96	99	100			19	60	21
MAY 26	20:01	14.4		146	5.85			STREAMBED													
MAY 26	20:10	14.4	174	174	0.15	2390	200	15	24	37	54	72	92	100					8	68	24
MAY 26	20:15	14.4	174	174	1.22	2500	195	15	24	37	53	69	90	99	100				10	66	24
MAY 26	20:20	14.4	174	174	2.44	2500	203	14	24	38	53	70	90	99	100				10	66	24
MAY 26	20:25	14.4	174	174	3.26	2540	207	16	24	36	52	70	90	99	100				10	66	24
MAY 26	20:30	14.4	174	174	3.93	2600	202	13	22	34	50	66	88	99	100				12	66	22
MAY 26	20:31	14.4		174	4.08			STREAMBED													

(CONTINUED)

SOUTH SASKATCHEWAN RIVER AT HIGHWAY NO. 41

STATION NO. 05AK001

(CONTINUED)

POINT INTEGRATING PARTICLE-SIZE ANALYSIS OF SUSPENDED SEDIMENT FOR 1967

DATE	TIME	WATER TEMP. (C)	PANEL DISCHARGE (M3/S)	SAMPLING VERTICAL (M)	DEPTH OF SAMPLE (M)	CONCENT. OF SAMPLE (MG/L)	DISSOLVED SOLIDS (MG/L)	PERCENT FINER THAN INDICATED SIZE, IN MILLIMETRES .002	.004	.008	.016	.031	.062	.125	.250	.500	1.00	2.00	PERCENT SAND	PERCENT SILT	PERCENT CLAY
JUN 04	16:00	13.3	278	42.7	0.15	2910	221	24	35	50	67	83	96	99	100				4	61	35
JUN 04	16:05	13.3	278	42.7	1.25	3320	213	19	30	44	61	75	87	95	99	100			13	57	30
JUN 04	16:10	13.3	278	42.7	2.50	3820	211	17	26	38	52	65	77	87	96	99	100		23	51	26
JUN 04	16:15	13.3	278	42.7	3.35	4560	221	13	21	32	44	54	64	75	89	94	97	100	36	43	21
JUN 04	16:20	13.3	278	42.7	4.08	5140	204	15	20	29	40	49	58	71	87	93	96	100	42	38	20
JUN 04	16:21	13.3		42.7	4.18			STREAMBED													
JUN 04	16:30	13.3	438	79.2	0.15	2810	220	22	33	49	70	87	95	99	100				5	62	33
JUN 04	16:35	13.3	438	79.2	1.74	3170	212	23	32	47	63	77	89	95	99	100			11	57	32
JUN 04	16:40	13.3	438	79.2	2.53	3340	224	19	31	45	61	73	85	93	98	100			15	54	31
JUN 04	16:45	13.3	438	79.2	4.66	3740	221	18	27	40	54	66	76	86	94	98	99	100	24	49	27
JUN 04	16:50	13.3	438	79.2	5.73	4570	225	15	23	33	45	54	63	71	83	92	96	100	37	40	23
JUN 04	16:51	13.3		79.2	5.82			STREAMBED													
JUN 04	17:00	13.3	523	113	0.15	2900	205	24	35	50	68	83	93	98	100				7	58	35
JUN 04	17:05	13.3	523	113	1.31	3050	192	24	34	49	65	79	90	97	100				10	56	34
JUN 04	17:10	13.3	523	113	2.65	3060	194	23	33	50	65	79	90	97	100				10	57	33
JUN 04	17:15	13.3	523	113	3.96	3080	215	23	32	47	64	78	89	96	100				11	57	32
JUN 04	17:20	13.3	523	113	5.30	3180	196	22	31	45	63	77	87	96	99	100			13	56	31
JUN 04	17:25	13.3	523	113	5.94	3180	224	20	30	44	60	75	88	96	100				12	58	30
JUN 04	17:28	13.3	523	113	6.52	3200	223	18	28	43	59	74	85	94	99	100			15	57	28
JUN 04	17:30	13.3		113	6.61			STREAMBED													
JUN 04	17:38	13.3	416	152	0.15	2890	194	23	32	49	66	81	93	99	100				7	61	32
JUN 04	17:40	13.3	416	152	1.37	2930	221	25	34	49	66	81	92	98	100				8	58	34
JUN 04	17:45	13.3	416	152	2.74	3030	202	24	33	48	66	79	90	97	100				10	57	33
JUN 04	17:50	13.3	416	152	4.08	2990	217	22	32	47	64	79	91	98	100				9	59	32
JUN 04	17:55	13.3	416	152	5.46	3140	204	23	33	48	65	77	89	97	100				11	56	33
JUN 04	18:00	13.3	416	152	6.16	3130	199	22	33	49	64	78	89	99	100				11	56	33
JUN 04	18:05	13.3	416	152	6.28	3150	217	21	31	46	63	74	89	98	100				11	58	31
JUN 04	18:06	13.3		152	6.83			STREAMBED													
JUN 04	18:15	12.8	235	183	0.15	2700	212	22	34	49	69	83	96	100					4	62	34
JUN 04	18:20	12.8	235	183	1.77	2830	199	21	32	47	66	85	95	99	100				5	63	32
JUN 04	18:30	12.8	235	183	3.57	2820	199	22	33	48	67	83	94	100					6	61	33
JUN 04	18:35	12.8	235	183	4.75	2860	197	27	33	50	68	83	94	99	100				6	61	33
JUN 04	18:40	12.8	235	183	5.40	2930	209	24	36	51	68	81	93	99	100				7	57	36
JUN 04	18:41	12.8		183	5.94			STREAMBED													

SOUTH SASKATCHEWAN RIVER AT HIGHWAY NO. 41 STATION NO. 05AK001

POINT INTEGRATING PARTICLE-SIZE ANALYSIS OF SUSPENDED SEDIMENT FOR 1988

DATE	TIME	WATER TEMP. (C)	PANEL DISCHARGE (M3/S)	SAMPLING VERTICAL (M)	DEPTH OF SAMPLE (M)	CONCENT. OF SAMPLE (MG/L)	DISSOLVED SOLIDS (MG/L)	PERCENT FINER THAN INDICATED SIZE, IN MILLIMETRES .002	.004	.008	.016	.031	.062	.125	.250	.500	1.00	2.00	PERCENT SAND	SILT	CLAY
JUN 13	15:00	17.0	125	54.9	0.15	684	178	17	26	41	59	77	94	99	100				6	68	26
JUN 13	15:05	17.0	125	54.9	0.91	842	190	13	22	34	49	66	85	96	99	100			15	63	22
JUN 13	15:10	17.0	125	54.9	1.83	930	185	15	20	32	47	62	80	95	99	100			20	60	20
JUN 13	15:15	17.0	125	54.9	2.44	1040	180	15	18	30	43	57	74	88	96	99	100		26	56	18
JUN 13	15:20	17.0	125	54.9	2.74	1160	177	10	17	27	39	52	67	82	94	98	99	100	33	50	17
JUN 13	15:21			54.9	3.05			STREAMBED													
JUN 13	15:30	17.0	166	85.3	0.15	722	184	18	25	40	58	76	92	98	99	100			8	67	25
JUN 13	15:35	17.0	166	85.3	1.19	947	183	15	19	30	44	61	77	90	97	99	100		23	58	19
JUN 13	15:40	17.0	166	85.3	2.41	1120	177	12	16	26	38	50	69	84	94	97	100		31	53	16
JUN 13	15:45	17.0	166	85.3	3.20	1710	178	8	11	17	25	34	47	63	77	85	90	100	53	36	11
JUN 13	16:00	17.0	166	85.3	3.69	2200	178	4	8	13	18	26	36	50	62	86	93	100	64	28	8
JUN 13	16:01			85.3	3.99			STREAMBED													
JUN 13	16:10	17.0	183	116	0.15	820	180	15	22	34	50	69	86	95	99	99	100		14	64	22
JUN 13	16:15	17.0	183	116	1.37	950	179	17	20	31	46	60	77	90	97	99	100		23	57	20
JUN 13	16:20	17.0	183	116	2.74	962	182	13	19	30	44	60	78	91	98	99	100		22	59	19
JUN 13	16:25	17.0	183	116	3.66	996	177	14	19	30	44	58	74	87	95	98	99	100	26	55	19
JUN 13	16:30	17.0	183	116	4.27	1130	183	12	16	24	36	50	66	81	91	97	99	100	34	50	16
JUN 13	16:31			116	4.57			STREAMBED													
JUN 13	16:40	17.0	158	140	0.15	784	191	16	22	35	54	70	89	98	99	99	100		11	67	22
JUN 13	16:45	17.0	158	140	1.65	831	187	14	21	32	48	66	85	97	99	100			15	64	21
JUN 13	16:50	17.0	158	140	3.29	887	184	14	21	32	47	65	83	93	99	99	100		17	62	21
JUN 13	16:55	17.0	158	140	4.39	947	185	17	22	33	46	61	79	92	99	99	100		21	57	22
JUN 13	17:00	17.0	158	140	5.18	1040	185	12	19	29	40	53	71	85	94	98	99	100	29	52	19
JUN 13	17:01			140	5.49			STREAMBED													
JUN 13	17:20	17.0	132	171	0.15	700	183	14	23	36	56	74	96	99	100				4	73	23
JUN 13	17:30	17.0	132	171	1.01	771	187	16	23	36	55	71	89	98	99	100			11	66	23
JUN 13	17:40	17.0	132	171	2.01	780	182	16	21	35	52	69	88	97	99	99	100		12	67	21
JUN 13	17:50	17.0	132	171	2.62	822	181	15	23	36	51	68	85	96	99	100			15	62	23
JUN 13	17:55	17.0	132	171	3.05	822	180	16	20	32	50	65	84	97	99	100			16	64	20
JUN 13	17:56			171	3.35			STREAMBED													

SOUTH SASKATCHEWAN RIVER AT HIGHWAY NO. 41 STATION NO. 05AK001

POINT INTEGRATING PARTICLE-SIZE ANALYSIS OF SUSPENDED SEDIMENT FOR 1969

DATE	TIME	WATER TEMP. (C)	PANEL DISCHARGE (M3/S)	SAMPLING VERTICAL (M)	DEPTH OF SAMPLE (M)	CONCENT. OF SAMPLE (MG/L)	DISSOLVED SOLIDS (MG/L)	PERCENT FINER THAN INDICATED SIZE, IN MILLIMETRES .002 .004 .008 .016 .031 .062 .125 .250 .500 1.00 2.00	PERCENT SAND SILT CLAY
JUN 03	12:30	17.2	101	61.0	0.15	204	175	DATA NOT AVAILABLE	
JUN 03	12:35	17.2	101	61.0	1.52	243	167	DATA NOT AVAILABLE	
JUN 03	12:40	17.2	101	61.0	2.41	356	171	DATA NOT AVAILABLE	
JUN 03	12:45	17.2	101	61.0	2.87	426	171	DATA NOT AVAILABLE	
JUN 03	12:46	17.2		61.0	3.08			STREAMBED	
JUN 03	12:55	17.2	100	91.4	0.15	211	183	DATA NOT AVAILABLE	
JUN 03	13:00	17.2	100	91.4	1.13	262	184	DATA NOT AVAILABLE	
JUN 03	13:02	17.2	100	91.4	2.23	386	179	DATA NOT AVAILABLE	
JUN 03	13:05	17.2	100	91.4	2.99	478	180	DATA NOT AVAILABLE	
JUN 03	13:07	17.2	.100	91.4	3.57	1010	179	DATA NOT AVAILABLE	
JUN 03	13:08	17.2		91.4	3.72			STREAMBED	
JUN 03	13:15	17.2	103	116	0.15	196	180	DATA NOT AVAILABLE	
JUN 03	13:18	17.2	103	116	1.22	258	174	DATA NOT AVAILABLE	
JUN 03	13:20	17.2	103	116	2.41	292	186	DATA NOT AVAILABLE	
JUN 03	13:22	17.2	103	116	3.23	350	174	DATA NOT AVAILABLE	
JUN 03	13:25	17.2	103	116	3.87	569	176	DATA NOT AVAILABLE	
JUN 03	13:26	17.2		116	4.02			STREAMBED	
JUN 03	15:25	17.2	100	140	0.15	174	182	DATA NOT AVAILABLE	
JUN 03	15:35	17.2	100	140	1.28	194	171	DATA NOT AVAILABLE	
JUN 03	15:45	17.2	100	140	2.56	207	172	DATA NOT AVAILABLE	
JUN 03	16:00	17.2	100	140	3.38	222	179	DATA NOT AVAILABLE	
JUN 03	16:10	17.2	100	140	4.08	404	176	DATA NOT AVAILABLE	
JUN 03	16:11	17.2		140	4.24			STREAMBED	
JUN 03	16:30	17.2	94.2	165	0.15	190	171	DATA NOT AVAILABLE	
JUN 03	16:32	17.2	94.2	165	1.34	206	170	DATA NOT AVAILABLE	
JUN 03	16:35	17.2	94.2	165	2.65	232	169	DATA NOT AVAILABLE	
JUN 03	16:40	17.2	94.2	165	3.54	240	177	DATA NOT AVAILABLE	
JUN 03	16:42	17.2	94.2	165	4.27	275	179	DATA NOT AVAILABLE	
JUN 03	16:45	17.2		165	4.42			STREAMBED	

(CONTINUED)

SOUTH SASKATCHEWAN RIVER AT HIGHWAY NO. 41

STATION NO. 05AK001

(CONTINUED)

POINT INTEGRATING PARTICLE-SIZE ANALYSIS OF SUSPENDED SEDIMENT FOR 1969

DATE	TIME	WATER TEMP. (C)	PANEL DISCHARGE (M3/S)	SAMPLING VERTICAL (M)	DEPTH OF SAMPLE (M)	CONCENT. OF SAMPLE (MG/L)	DISSOLVED SOLIDS (MG/L)	PERCENT FINER THAN INDICATED SIZE, IN MILLIMETRES .002	.004	.008	.016	.031	.062	.125	.250	.500	1.00	2.00	PERCENT SAND	SILT	CLAY
JUL 03	14:00	16.0	235	42.7	0.15	2060		30	36	55	75	89	98	99	100				2	62	36
JUL 03	14:02	16.0	235	42.7	0.67	2410		27	35	50	67	80	92	99	100				8	57	35
JUL 03	14:05	16.0	235	42.7	1.04	2430		23	31	45	62	77	90	97	99	100			10	59	31
JUL 03	14:07	16.0	235	42.7	2.04	2760		20	28	41	55	69	72	91	97	99	100		28	44	28
JUL 03	14:09	16.0	235	42.7	2.74	3370		17	24	34	48	60	73	86	95	99	100		27	49	24
JUL 03	14:11	16.0	235	42.7	3.32	4730		12	19	27	34	42	51	63	85	94	98	100	49	32	19
JUL 03	14:12			42.7	3.41			STREAMBED													
JUL 03	14:19	16.0	407	79.2	0.15	2130		27	35	53	72	86	94	98	100				6	59	35
JUL 03	14:21	16.0	407	79.2	1.13	2470		24	32	46	62	76	88	95	99	100			12	56	32
JUL 03	14:23	16.0	407	79.2	1.71	2440		23	31	46	62	77	88	95	99	100			12	57	31
JUL 03	14:25	16.0	407	79.2	3.41	2780		31	38	41	55	68	79	88	94	98	100		21	41	38
JUL 03	14:27	16.0	407	79.2	4.54	3000		19	26	38	51	64	75	84	91	97	100		25	49	26
JUL 03	14:29	16.0	407	79.2	5.58	3700		14	21	31	41	51	60	70	80	92	97	100	40	39	21
JUL 03	14:30			79.2	5.67			STREAMBED													
JUL 03	14:40	16.0	496	113	0.15	2300		28	35	50	68	82	92	99	100				8	57	35
JUL 03	14:45	16.0	496	113	1.31	2300		23	33	48	65	79	91	97	99	100			9	58	33
JUL 03	14:50	16.0	496	113	2.62	2360		25	34	48	64	80	91	97	99	100			9	57	34
JUL 03	15:00	16.0	496	113	3.90	2500		26	33	48	63	76	86	97	100				14	53	33
JUL 03	15:05	16.0	496	113	5.21	2480		26	31	47	62	76	85	95	99	100			15	54	31
JUL 03	15:10	16.0	496	113	5.88	2570		25	30	44	60	74	86	94	99	100			14	56	30
JUL 03	15:12	16.0	496	113	6.43	2620		23	28	45	58	71	82	90	97	100			18	54	28
JUL 03	15:15			113	6.66			STREAMBED													
JUL 03	15:22	16.0	394	152	0.15	2210		24	36	51	67	82	96	98	100				4	60	36
JUL 03	15:25	16.0	394	152	1.31	2310		23	33	48	65	82	92	99	100				8	59	33
JUL 03	15:27	16.0	394	152	2.62	2360		26	32	48	65	77	92	99	100				8	60	32
JUL 03	15:30	16.0	394	152	3.90	2370		26	32	48	64	79	90	98	100				10	58	32
JUL 03	15:33	16.0	394	152	5.21	2510		26	34	50	65	78	89	97	99	100			11	55	34
JUL 03	15:36	16.0	394	152	5.88	2540		26	35	49	64	76	89	97	99	100			11	54	35
JUL 03	15:39	16.0	394	152	6.43	2670		23	31	45	59	72	83	92	97	99	100		17	52	31
JUL 03	15:40			152	6.52			STREAMBED													
JUL 03	15:47	16.0	212	183	0.15	2180		28	38	52	71	86	95	98	100				5	57	38
JUL 03	15:50	16.0	212	183	1.74	2300		28	35	50	68	83	95	99	100				5	60	35
JUL 03	15:52	16.0	212	183	3.44	2330		28	37	52	68	81	94	99	100				6	57	37
JUL 03	15:55	16.0	212	183	4.60	2290		28	36	50	68	82	93	99	100				7	57	36
JUL 03	15:57	16.0	212	183	5.67	2360		26	36	50	66	79	91	98	100				9	55	36
JUL 03	15:60			183	5.76			STREAMBED													

SOUTH SASKATCHEWAN RIVER AT HIGHWAY NO. 41 STATION NO. 05AK001

POINT INTEGRATING PARTICLE-SIZE ANALYSIS OF SUSPENDED SEDIMENT FOR 1970

DATE	TIME	WATER TEMP. (C)	PANEL DISCHARGE (M3/S)	SAMPLING VERTICAL (M)	DEPTH OF SAMPLE (M)	CONCENT. OF SAMPLE (MG/L)	DISSOLVED SOLIDS (MG/L)	PERCENT FINER THAN INDICATED SIZE, IN MILLIMETRES .002 .004 .008 .016 .031 .062 .125 .250 .500 1.00 2.00	PERCENT SAND SILT CLAY
JUN 09	12:50	20.8	81.5	165	4.15	502	177	DATA NOT AVAILABLE	
JUN 09	12:55	20.8	81.5	165	3.57	406	175	DATA NOT AVAILABLE	
JUN 09	13:00	20.8	81.5	165	2.68	376	177	DATA NOT AVAILABLE	
JUN 09	13:05	20.8	81.5	165	1.34	362	177	DATA NOT AVAILABLE	
JUN 09	13:08	20.8	81.5	165	0.88	338	179	DATA NOT AVAILABLE	
JUN 09	13:10	20.8	81.5	165	0.15	316	184	DATA NOT AVAILABLE	
JUN 09	13:11	20.8		165	4.33			STREAMBED	
JUN 09	13:15	20.8		140	4.75			STREAMBED	
JUN 09	13:18	20.8	133	140	4.48	428	174	DATA NOT AVAILABLE	
JUN 09	13:20	20.8	133	140	3.81	398	173	DATA NOT AVAILABLE	
JUN 09	13:21	20.8	133	140	2.56	383	176	DATA NOT AVAILABLE	
JUN 09	13:22	20.8	133	140	1.43	362	178	DATA NOT AVAILABLE	
JUN 09	13:23	20.8	133	140	0.94	369	180	DATA NOT AVAILABLE	
JUN 09	13:24	20.8	133	140	0.15	328	181	DATA NOT AVAILABLE	
JUN 09	13:37	20.8	102	116	4.08	1020	181	DATA NOT AVAILABLE	
JUN 09	13:39	20.8	102	116	3.47	565	174	DATA NOT AVAILABLE	
JUN 09	13:41	20.8	102	116	2.62	478	226	DATA NOT AVAILABLE	
JUN 09	13:43	20.8	102	116	1.31	439	175	DATA NOT AVAILABLE	
JUN 09	13:45	20.8	102	116	0.88	435	173	DATA NOT AVAILABLE	
JUN 09	13:50	20.8	102	116	0.15	351	177	DATA NOT AVAILABLE	
JUN 09	13:51	20.8		116	4.36			STREAMBED	
JUN 09	13:53	20.8		85.3	3.26			STREAMBED	
JUN 09	13:55	20.8	139	85.3	3.05	760	177	DATA NOT AVAILABLE	
JUN 09	14:00	20.8	139	85.3	2.62	579	178	DATA NOT AVAILABLE	
JUN 09	14:10	20.8	139	85.3	1.95	477	176	DATA NOT AVAILABLE	
JUN 09	14:20	20.8	139	85.3	0.98	407	180	DATA NOT AVAILABLE	
JUN 09	14:30	20.8	139	85.3	0.64	454	178	DATA NOT AVAILABLE	
JUN 09	14:40	20.8	139	85.3	0.15	355	179	DATA NOT AVAILABLE	
JUN 09	14:45	20.8		54.9	2.71			STREAMBED	
JUN 09	14:47	20.8	92.8	54.9	2.59	658	178	DATA NOT AVAILABLE	
JUN 09	14:49	20.8	92.8	54.9	2.16	499	183	DATA NOT AVAILABLE	
JUN 09	14:50	20.8	92.8	54.9	1.37	438	178	DATA NOT AVAILABLE	
JUN 09	14:52	20.8	92.8	54.9	0.55	357	178	DATA NOT AVAILABLE	
JUN 09	14:55	20.8	92.8	54.9	0.15	343	183	DATA NOT AVAILABLE	

(CONTINUED)

SOUTH SASKATCHEWAN RIVER AT HIGHWAY NO. 41

STATION NO. 05AK001

(CONTINUED)

POINT INTEGRATING PARTICLE-SIZE ANALYSIS OF SUSPENDED SEDIMENT FOR 1970

DATE	TIME	WATER TEMP. (C)	PANEL DISCHARGE (M3/S)	SAMPLING VERTICAL (M)	DEPTH OF SAMPLE (M)	CONCENT. OF SAMPLE (MG/L)	DISSOLVED SOLIDS (MG/L)	PERCENT FINER THAN INDICATED SIZE, IN MILLIMETRES .002	.004	.008	.016	.031	.062	.125	.250	.500	1.00	2.00	PERCENT SAND	SILT	CLAY
JUN 18	12:34			48.8	3.05			STREAMBED													
JUN 18	12:35	16.8	196	48.8	2.74	4090		13	22	34	46	55	68	81	98	100			32	46	22
JUN 18	12:37	16.8	196	48.8	2.44	3520		18	26	38	52	66	79	89	98	99	100		21	53	26
JUN 18	12:38	16.8	196	48.8	1.83	3100		19	27	42	59	74	88	97	99	100			12	61	27
JUN 18	12:40	16.8	196	48.8	0.91	2910		20	30	45	62	79	93	98	100				7	63	30
JUN 18	12:45	16.8	196	48.8	0.30	2730		22	34	50	68	82	95	99	100				5	61	34
JUN 18	12:54			79.2	5.24			STREAMBED													
JUN 18	12:55	16.8	297	79.2	4.94	4500		16	21	31	42	53	63	73	89	98	100		37	42	21
JUN 18	13:10	16.8	297	79.2	4.21	3700		18	25	36	50	63	75	85	92	96	98	100	25	50	25
JUN 18	13:12	16.8	297	79.2	3.14	3430		21	28	40	54	68	82	92	97	99	100		18	54	28
JUN 18	13:14	16.8	297	79.2	1.58	2730		27	35	49	66	80	91	97	99	100			9	56	35
JUN 18	13:18	16.8	297	79.2	0.30	2560		21	29	44	61	74	86	96	99	100			14	57	29
JUN 18	13:24			110	5.70			STREAMBED													
JUN 18	13:25	16.8	359	110	5.39	3300		18	25	37	52	66	78	87	94	97	99	100	22	53	25
JUN 18	13:26	16.8	359	110	4.57	3190		23	31	44	60	74	87	96	100				13	56	31
JUN 18	13:28	16.8	359	110	3.41	3040		19	28	44	60	76	88	97	100				12	60	28
JUN 18	13:30	16.8	359	110	1.71	2940		18	27	41	60	77	90	97	99	100			10	63	27
JUN 18	13:32	16.8	359	110	0.30	2770		24	33	47	66	83	95	98	100				5	62	33
JUN 18	13:59			146	6.46			STREAMBED													
JUN 18	14:00	16.8	344	146	6.16	3280		20	26	39	59	69	81	94	98	99	100		19	55	26
JUN 18	14:02	16.8	344	146	5.82	3190		20	27	40	57	73	88	96	100				12	61	27
JUN 18	14:04	16.8	344	146	5.18	2990		13	22	36	56	75	89	97	99	100			11	67	22
JUN 18	14:06	16.8	344	146	3.87	3110		18	30	46	63	78	91	98	100				9	61	30
JUN 18	14:08	16.8	333	146	2.59	3070		25	33	47	63	77	90	96	99	100			10	57	33
JUN 18	14:10	16.8	344	146	1.28	2980		25	33	47	54	78	92	98	99	100			8	59	33
JUN 18	14:15	16.8	344	146	0.30	2920		23	33	49	67	82	93	99	100				7	60	33
JUN 18	14:29			183	5.06			STREAMBED													
JUN 18	14:30	16.8	168	183	4.75	2980		23	31	46	65	80	93	99	100				7	62	31
JUN 18	14:32	16.8	168	183	4.05	2880		22	34	50	68	81	94	99	100				6	60	34
JUN 18	14:34	16.8	168	183	3.05	2960		29	38	54	70	83	95	100					5	57	38
JUN 18	14:36	16.8	168	183	1.52	2790		22	31	46	66	84	95	99	100				5	64	31
JUN 18	14:38	16.8	168	183	0.30	2750		25	33	48	67	84	96	100					4	63	33

SOUTH SASKATCHEWAN RIVER AT HIGHWAY NO. 41

STATION NO. 05AK001

POINT INTEGRATING PARTICLE-SIZE ANALYSIS OF SUSPENDED SEDIMENT FOR 1971

DATE	TIME	WATER TEMP. (C)	PANEL DISCHARGE (M3/S)	SAMPLING VERTICAL (M)	DEPTH OF SAMPLE (M)	CONCENT. OF SAMPLE (MG/L)	DISSOLVED SOLIDS (MG/L)	PERCENT FINER THAN INDICATED SIZE, IN MILLIMETRES .002	.004	.008	.016	.031	.062	.125	.250	.500	1.00	2.00	PERCENT SAND	SILT	CLAY
JUN 08	14:14			171	4.15			STREAMBED													
JUN 09	14:15	15.0	1140	171	3.99	1400		12	17	24	38	51	76	95	99	100			24	59	17
JUN 09	14:20	15.0	1140	171	3.32	1340		15	19	26	39	60	85	99	100				15	66	19
JUN 09	14:25	15.0	1140	171	2.50	1380		12	17	26	39	56	82	97	99	100			18	65	17
JUN 09	14:30	15.0	1140	171	1.25	1330		11	16	29	41	56	81	99	100				19	65	16
JUN 09	14:35	15.0	1140	171	0.15	1150		12	17	29	45	66	90	99	100				10	73	17
JUN 09	14:40	15.0	1140	140	0.15	1350		11	16	26	40	56	85	97	99	100			15	69	16
JUN 09	14:45	15.0	1140	140	1.22	1390		9	14	24	39	56	79	95	99	100			21	65	14
JUN 09	14:50	15.0	1140	140	2.47	1470		12	17	26	39	55	80	95	99	100			20	63	17
JUN 09	14:55	15.0	1140	140	3.66	1440		7	13	23	36	54	82	95	99	100			18	69	13
JUN 09	15:00	15.0	1140	140	4.94	1640		9	13	20	48	64	78	92	98	100			22	65	13
JUN 09	15:05	15.0	1140	140	5.55	1780		8	13	20	28	35	63	87	93	97	99	100	37	50	13
JUN 09	15:09	15.0	1140	140	6.00	1110		14	20	33	52	73	93	98	100				7	73	20
JUN 09	15:10			140	6.16			STREAMBED													
JUN 09	15:29			116	5.36			STREAMBED													
JUN 09	15:30	15.0	1140	116	5.21	1650		10	15	23	35	48	67	83	93	98	99	100	33	52	15
JUN 09	15:35	15.0	1140	116	4.30	1610		8	13	20	32	49	71	87	96	99	100		29	58	13
JUN 09	15:45	15.0	1140	116	3.23	1480		8	12	20	33	54	79	95	99	100			21	67	12
JUN 09	15:50	15.0	1140	116	1.62	1410		8	12	22	37	53	78	93	97	99	100		22	66	12
JUN 09	16:00	15.0	1140	116	0.15	1150		11	16	27	42	64	88	98	99	100			12	72	16
JUN 09	16:14			91.4	5.21			STREAMBED													
JUN 09	16:15	15.0	1140	91.4	5.06	2680		5	7	12	20	29	44	59	80	98	100		56	37	7
JUN 09	16:20	15.0	1140	91.4	3.84	1990		6	10	17	27	39	61	85	95	99	100		39	51	10
JUN 09	16:25	15.0	1140	91.4	2.87	1800		10	14	22	33	48	69	86	95	98	100		31	55	14
JUN 09	16:30	15.0	1140	91.4	1.43	1340		9	14	24	36	50	74	90	97	99	100		26	60	14
JUN 09	16:40	15.0	1140	91.4	0.15	1100		15	20	31	49	70	90	96	98	99	99	100	10	70	20
JUN 09	16:59			61.0	4.30			STREAMBED													
JUN 09	17:00	15.0	1140	61.0	4.15	3160		5	6	11	17	24	41	62	94	100			59	35	6
JUN 03	17:05	15.0		61.0	3.44			DATA NOT AVAILABLE													
JUN 09	17:10	15.0	1140	61.0	2.59	2090		7	11	18	28	42	65	87	97	100			35	54	11
JUN 09	17:15	15.0	1140	61.0	1.28	1550		8	12	21	35	50	72	91	98	100			28	60	12
JUN 09	17:20	15.0	1140	61.0	0.15	1160		14	18	34	61	66	86	98	100				14	68	18

NOTE :

APPENDIX E

DAILY MEAN CONCENTRATION AND LOADING DATA 1966 TO 1984

(Loadings are not available for 1985, 1986 and 1987)

WATER SURVEY OF CANADA
SEP 03 1987 PAGE 1
CALGARY, ALTA.

SOUTH SASKATCHEWAN RIVER AT HIGHWAY NO. 41 - STATION NO. 05AK001

SUSPENDED SEDIMENT FOR 1966

LOCATION: LAT 50 44 15 N LONG 110 05 45 W
DRAINAGE AREA: 66 000 KM2
TYPE OF FLOW: REGULATED
TYPE OF GAUGE: MANUAL

TOTAL SUSPENDED SEDIMENT LOAD 2 430 000 TONNES FOR THE PERIOD APR 22 TO DEC 31

REMARKS:

DAY	APR DAILY DISCHARGE (M3/S)	APR MEAN CONCENTRATION (MG/L)	APR DAILY LOAD (TNE)	MAY DAILY DISCHARGE (M3/S)	MAY MEAN CONCENTRATION (MG/L)	MAY DAILY LOAD (TNE)	JUN DAILY DISCHARGE (M3/S)	JUN MEAN CONCENTRATION (MG/L)	JUN DAILY LOAD (TNE)	DAY
1				217	75	1 410	561	800 S	38 800	1
2				217	70 S	1 310	575	830 S	41 200	2
3				214	60	1 110	685	840 S	49 700	3
4				210	46 S	835	821	1 340 S	95 100	4
5				200	40 S	691	841	1 300 S	94 500	5
6				204	37 S	652	833	1 180 S	84 900	6
7				205	30	531	1 030	1 210 S	108 000	7
8				212	26 S	476	1 150	1 960 S	195 000	8
9				233	31 S	624	1 100	1 710 S	163 000	9
10				309	140	3 740	977	1 330 S	112 000	10
11				379	320 S	10 500	898	940 S	72 900	11
12				408	455 S	16 000	867	820 S	61 400	12
13				476	680	28 000	892	790 S	60 900	13
14				555	1 020 S	48 900	881	770 S	58 600	14
15				555	1 180 S	56 600	833	690 S	49 700	15
16				538	1 000 S	46 500	770	520 S	34 600	16
17				493	800 S	34 100	691	590 S	35 200	17
18				479	500 S	20 700	623	600	32 300	18
19				453	395 S	15 500	547	535	25 300	19
20				439	290 S	11 000	498	495	21 300	20
21				408	260 S	9 170	487	430	18 100	21
22	200	55	950	391	260 S	8 780	515	320	14 200	22
23	198	40	684	385	285 S	9 480	513	210 S	9 310	23
24	198	40	684	377	240 S	7 820	496	160	6 860	24
25	188	40	650	419	225 S	8 150	498	360	15 500	25
26	202	50	873	433	230 S	8 600	484	600 S	25 100	26
27	227	80	1 570	396	240 S	8 210	450	350	13 600	27
28	235	85 S	1 730	351	200 S	6 070	433	240 S	8 980	28
29	233	80	1 610	348	190 S	5 710	379	210	6 880	29
30	216	75 S	1 400	416	260 S	9 350	360	200 S	6 220	30
31				487	430 S	18 100				31
TOTAL	1 897		10 151	11 407		398 619	20 688		1 559 150	TOTAL

S - SAMPLE(S) COLLECTED THIS DAY

WATER SURVEY OF CANADA
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CALGARY, ALTA.

SOUTH SASKATCHEWAN RIVER AT HIGHWAY NO. 41 - STATION NO. 05AK001

SUSPENDED SEDIMENT FOR 1966

DAY	JUL DAILY DISCHARGE (M3/S)	JUL MEAN CONCENTRATION (MG/L)	JUL DAILY LOAD (TNE)	AUG DAILY DISCHARGE (M3/S)	AUG MEAN CONCENTRATION (MG/L)	AUG DAILY LOAD (TNE)	SEP DAILY DISCHARGE (M3/S)	SEP MEAN CONCENTRATION (MG/L)	SEP DAILY LOAD (TNE)	DAY
1	340	310	9 110	214	46 S	851	157 E	15	203	1
2	317	1 950 S	53 400	197	40	681	174 E	15 S	226	2
3	328	380	10 800	188	36 S	585	190 E	30	492	3
4	368	160 S	5 090	171	40	591	206 A	55 S	979	4
5	422	190	6 930	148	41 S	524	188 A	45 S	731	5
6	544	440 S	20 700	142	45	552	176 E	30	456	6
7	640	1 180 S	65 200	146	60 S	757	163 A	25 S	352	7
8	617	660 S	35 200	150	45	583	149 E	20	257	8
9	569	540 S	26 500	151	23 S	300	135 A	17 S	198	9
10	498	330 S	14 200	157	25	339	129 E	10	111	10
11	462	300 S	12 000	198	120	2 050	122 E	9 S	94.9	11
12	467	220	8 880	192	85 S	1 410	116 A	10 S	100	12
13	476	200 S	8 230	178	40	615	121 E	10	105	13
14	470	210 S	8 530	171	35 S	517	127 A	12 S	132	14
15	377	210 S	6 840	164	35	496	140	15	181	15
16	493	300 S	12 800	155	35 S	469	135	16 S	187	16
17	501	320 S	13 900	145	21 S	263	124	15	161	17
18	447	350 S	13 500	139	26	312	107	10 S	92.4	18
19	428	450	16 600	133	27 S	310	80.4	8 S	55.6	19
20	391	450 S	15 200	137	50	592	93.4	10	80.7	20
21	371	220 S	7 050	130	50 S	562	103	10 S	89.0	21
22	328	140 S	3 970	115	22 S	219	101	10	87.3	22
23	251	110	2 390	119	55	565	98.3	11 S	93.4	23
24	240	115 S	2 380	124	155 S	1 660	104	10	89.9	24
25	227	240	4 710	126	70	762	98.8	8 S	68.3	25
26	230	540 S	10 700	132	25 S	285	96.3	17 S	141	26
27	235	675	13 700	135	22	257	93.4	12	96.8	27
28	237	485 S	9 930	134	20 S	232	91.5	9 S	71.2	28
29	232	185 S	3 710	129	20 S	223	94.6	12	98.1	29
30	230	105	2 090	131	20	226	118	20	204	30
31	220	65	1 240	141	20 S	244				31
TOTAL	11 956		425 480	4 692		18 032	3 831.7		6 233.6	TOTAL

A - MANUAL GAUGE E - ESTIMATED S - SAMPLE(S) COLLECTED THIS DAY

SOUTH SASKATCHEWAN RIVER AT HIGHWAY NO. 41 - STATION NO. 05AK001

SUSPENDED SEDIMENT FOR 1966

DAY	OCT DAILY DISCHARGE (M3/S)	OCT MEAN CONCENTRATION (MG/L)	OCT DAILY LOAD (TNE)	NOV DAILY DISCHARGE (M3/S)	NOV MEAN CONCENTRATION (MG/L)	NOV DAILY LOAD (TNE)	DEC DAILY DISCHARGE (M3/S)	DEC MEAN CONCENTRATION (MG/L)	DEC DAILY LOAD (TNE)	DAY
1	112	11 S	106	123	13	138	85.5 B	10	73.9	1
2	108	11	103	124	14 S	150	81.6 B	10	70.5	2
3	108	11 S	103	131	14	158	74.5 B	10	64.4	3
4	105	10	90.7	133	14 S	161	70.8 B	10	61.2	4
5	100	9 S	77.8	132	14	160	68.0 B	10	58.8	5
6	83.8	9	65.2	127	14	154	65.1 B	10	56.2	6
7	75.6	8 S	52.3	132	14	160	63.7 B	10	55.0	7
8	68.8	9	53.5	132	14	160	60.6 B	10	52.4	8
9	67.7	10 S	58.5	118 B	15	153	62.3 B	10	53.8	9
10	77.6	8 S	53.6	112 B	15	145	65.1 B	9	50.6	10
11	81.8	10	70.7	108 B	15	140	69.4 B	9	54.0	11
12	95.1	14 S	115	108 B	15	140	76.5 B	8	52.9	12
13	92.6	19	152	102 B	15	132	81.6 B	8 S	56.4	13
14	88.9	21 S	161	99.1 B	15	128	89.2 B	9	69.4	14
15	87.5	27	204	92.0 B	14	111	96.3 B	11	91.5	15
16	83.8	30 S	217	85.0 B	14	103	101 B	14 S	122	16
17	97.7	10 S	84.4	79.3 B	14	95.9	106 B	14	128	17
18	110	15	143	75.0 B	13	84.2	110 B	15	143	18
19	127	20 S	219	73.3 B	13	82.3	119 B	15	154	19
20	127	25	274	73.6 B	13	82.7	126 B	16	174	20
21	136	60 S	705	75.0 B	12	77.8	129 B	17	189	21
22	143	80	988	79.3 B	12	82.2	127 B	18	198	22
23	110	37	352	86.4 B	12	89.6	125 B	18	194	23
24	98.3	25	212	94.9 B	12	98.4	119 B	19 S	195	24
25	105	18	163	99.1 B	12	103	110 B	18	171	25
26	121	16	167	103 B	11	97.9	105 B	17	154	26
27	123	15	159	108 B	11	103	100 B	16	138	27
28	125	15	162	112 B	11	106	99.1 B	16	137	28
29	117	15 S	152	102 B	11	96.9	97.7 B	15	127	29
30	114	14	138	90.6 B	11	86.1	94.9 B	15 S	123	30
31	116	13 S	130				90.6 B	15	117	31
TOTAL	3 206.2		5 731.7	3 109.6		3 579.0	2 869.5		3 385.0	TOTAL

B - ICE CONDITIONS

S - SAMPLE(S) COLLECTED THIS DAY

SOUTH SASKATCHEWAN RIVER AT HIGHWAY NO. 41 - STATION NO. 05AK001

SUSPENDED SEDIMENT FOR 1967

LOCATION: LAT 50 44 15 N LONG 110 05 45 W
DRAINAGE AREA: 66 000 KM2
TYPE OF FLOW: REGULATED
TYPE OF GAUGE: MANUAL

TOTAL SUSPENDED SEDIMENT LOAD 7 480 000 TONNES FOR THE PERIOD JAN 01 TO DEC 31

REMARKS:

DAY	JAN DAILY DISCHARGE (M3/S)	JAN MEAN CONCENTRATION (MG/L)	JAN DAILY LOAD (TNE)	FEB DAILY DISCHARGE (M3/S)	FEB MEAN CONCENTRATION (MG/L)	FEB DAILY LOAD (TNE)	MAR DAILY DISCHARGE (M3/S)	MAR MEAN CONCENTRATION (MG/L)	MAR DAILY LOAD (TNE)	DAY
1	85.0 B	15	110	91.2 B	12	94.6	105 B	23	209	1
2	81.6 B	16	113	94.9 B	11	90.2	109 B	50	471	2
3	74.2 B	16	103	97.7 B	11 S	92.9	121 B	80	836	3
4	73.1 B	16	101	99.1 B	16 S	137	140 B	120 S	1 450	4
5	70.8 B	17	104	101 B	18	157	147 B	135	1 710	5
6	69.4 B	18	108	102 B	19	167	159 B	160	2 200	6
7	70.2 B	18 S	109	99.1 B	20	171	173 B	160	2 390	7
8	70.5 B	19	116	98.5 B	21	179	164 B	115	1 630	8
9	70.8 B	20	122	96.3 B	22	183	158 B	65 S	887	9
10	71.1 B	20	123	93.4 B	22 S	178	136 B	45 S	529	10
11	72.2 B	18	112	92.0 B	20	159	120 B	40	415	11
12	73.9 B	14	89.4	91.2 B	19	150	110 B	40	380	12
13	76.5 B	11 S	72.7	90.9 B	18	141	105 B	35	318	13
14	82.1 B	11	78.0	90.6 B	16	125	104 B	35	314	14
15	86.4 B	11	82.1	89.2 B	16	123	102 B	30	264	15
16	87.8 B	11	83.4	88.6 B	15	115	102 B	27	238	16
17	88.3 B	11	83.9	88.1 B	15	114	99.1 B	24 S	205	17
18	87.8 B	11	83.4	88.6 B	14	107	94.9 B	35	287	18
19	82.1 B	11	78.0	89.5 B	14	108	93.4 B	40	323	19
20	81.6 B	11 S	77.6	90.0 B	13	101	89.2 B	45	347	20
21	81.3 B	12	84.3	90.9 B	13 S	102	89.8 B	50	388	21
22	82.1 B	12	85.1	92.0 B	13	103	99.1 B	60	514	22
23	82.7 B	13	92.9	93.4 B	14	113	110 B	80	760	23
24	84.4 B	14	102	94.3 B	14	114	122 B	105	1 110	24
25	85.0 B	14	103	96.3 B	14	116	147 B	120	1 520	25
26	85.0 B	15	110	97.7 B	14	118	170 B	130	1 910	26
27	85.5 B	15 S	111	99.1 B	15	128	210 B	150	2 720	27
28	86.4 B	15	112	101 B	15 S	131	238 B	180	3 700	28
29	87.8 B	14	106				258 B	205	4 570	29
30	90.6 B	13	102				278 B	205	4 920	30
31	90.6 B	13	102				283 B	200	4 890	31
TOTAL	2 496.8		3 059.8	2 636.6		3 617.7	4 436.5		42 405	TOTAL

B - ICE CONDITIONS

S - SAMPLE(S) COLLECTED THIS DAY

SOUTH SASKATCHEWAN RIVER AT HIGHWAY NO. 41 - STATION NO. 05AK001

SUSPENDED SEDIMENT FOR 1967

DAY	APR DAILY DISCHARGE (M3/S)	APR MEAN CONCENTRATION (MG/L)	APR DAILY LOAD (TNE)	MAY DAILY DISCHARGE (M3/S)	MAY MEAN CONCENTRATION (MG/L)	MAY DAILY LOAD (TNE)	JUN DAILY DISCHARGE (M3/S)	JUN MEAN CONCENTRATION (MG/L)	JUN DAILY LOAD (TNE)	DAY
1	283 B	180	4 400	223	490 S	9 440	917	1 290 S	102 000	1
2	263 B	150	3 410	238	325 S	6 680	1 310	1 350 S	153 000	2
3	227 B	120	2 350	230	300 S	5 960	2 010	3 250 S	564 000	3
4	193 B	100	1 670	213	240 S	4 420	1 900	3 290 S	540 000	4
5	190 B	100	1 640	214	170 S	3 140	1 600	2 380 S	329 000	5
6	193 B	110	1 830	233	180 S	3 620	1 610	1 650 S	230 000	6
7	201 B	130	2 260	237	225 S	4 610	1 600	1 580 S	218 000	7
8	212 B	160	2 930	263	310 S	7 040	1 400	1 460 S	177 000	8
9	241 B	200	4 160	279	535 S	12 900	1 270	1 150 S	126 000	9
10	272 B	260	6 110	476	745 S	30 600	1 250	1 020 S	110 000	10
11	292 B	340	8 580	742	3 880 S	249 000	1 230	1 000 S	106 000	11
12	294 B	420	10 700	731	3 500 S	221 000	1 290	970 S	108 000	12
13	456 E	490	19 300	663	2 380 S	136 000	1 380	1 050 S	125 000	13
14	430 E	520	19 300	501	1 160 S	50 200	1 350	1 000 S	117 000	14
15	445 E	530	20 400	473	850 S	34 700	1 260	700 S	76 200	15
16	459 E	530	21 000	527	800 S	36 400	1 080	620 S	57 900	16
17	484 E	510	21 300	549	850 S	40 300	1 030	730 S	65 000	17
18	450 E	480	18 700	609	1 200 S	63 100	983	670 S	56 900	18
19	470 E	430	17 500	702	1 260 S	76 400	983	650 S	55 200	19
20	377 E	360	11 700	807	1 650 S	115 000	1 130	800 S	78 100	20
21	283 E	280	6 850	847	2 030 S	149 000	1 260	920 S	100 000	21
22	224	220	4 260	838	1 950 S	141 000	1 270	850 S	93 300	22
23	211	200	3 650	883	1 590 S	121 000	1 190	780 S	80 200	23
24	210	200 S	3 630	977	1 780 S	150 000	1 140	660 S	65 000	24
25	203	200	3 510	1 080	2 550 S	238 000	1 120	560 S	54 200	25
26	209	210	3 790	1 150	2 800 S	278 000	1 070	540 S	49 900	26
27	205	220 S	3 900	1 140	2 220 S	219 000	1 010	520 S	45 400	27
28	201	300	5 210	1 030	1 750 S	156 000	934	560 S	45 200	28
29	214	380 S	7 030	912	1 350 S	106 000	827	510 S	36 400	29
30	214	275 S	5 080	861	1 140 S	84 800	793	535 S	36 700	30
31				855	1 080 S	79 800				31
TOTAL	8 606		246 150	19 483		2 833 110	37 177		4 000 600	TOTAL

B - ICE CONDITIONS E - ESTIMATED S - SAMPLE(S) COLLECTED THIS DAY

SOUTH SASKATCHEWAN RIVER AT HIGHWAY NO. 41 - STATION NO. OSAKOO1

SUSPENDED SEDIMENT FOR 1967

DAY	JUL DAILY DISCHARGE (M3/S)	JUL MEAN CONCENTRATION (MG/L)	JUL DAILY LOAD (TNE)	AUG DAILY DISCHARGE (M3/S)	AUG MEAN CONCENTRATION (MG/L)	AUG DAILY LOAD (TNE)	SEP DAILY DISCHARGE (M3/S)	SEP MEAN CONCENTRATION (MG/L)	SEP DAILY LOAD (TNE)	DAY
1	793	530 S	36 300	197	26	443	84.1	7	50.9	1
2	799	450 S	31 100	165	27 S	385	81.3	7 S	49.2	2
3	782	425 S	28 700	149	23	296	77.9	8 S	53.8	3
4	748	375 S	24 200	146	18 S	227	68.8	7	41.6	4
5	725	355 S	22 200	143	22	272	64.3	11 S	61.1	5
6	694	280 S	16 800	154	32 S	426	59.7	5 S	25.8	6
7	657	290 S	16 500	163	45	634	56.9	6	29.5	7
8	606	340 S	17 800	161	55 S	765	56.1	7	33.9	8
9	600	350 S	18 100	163	49	690	56.1	8 S	38.8	9
10	651	325 S	18 300	144	42 S	523	55.5	10	48.0	10
11	600	345 S	17 900	142	34	417	54.9	10	47.4	11
12	549	320 S	15 200	154	28 S	373	85.0 E	11 S	80.8	12
13	510	260 S	11 500	149	24 S	309	139 E	11	132	13
14	473	205 S	8 380	135	20	233	96.3 E	10	83.2	14
15	439	170 S	6 450	135	20 S	233	87.8 E	10	75.9	15
16	374	135 S	4 360	144	20	249	90.6 E	9	70.5	16
17	371	125 S	4 010	133	16 S	184	110 E	9 S	85.5	17
18	371	135 S	4 330	120	12	124	125	10	108	18
19	348	110 S	3 310	108	11 S	103	129	10 S	111	19
20	374	125 S	4 040	88.9	10 S	76.8	116	8	80.2	20
21	368	140 S	4 450	103	8	71.2	105	8 S	72.6	21
22	323	100 S	2 790	101	9 S	78.5	83.8	8	57.9	22
23	286	75 S	1 850	107	8 S	74.0	65.1	7 S	39.4	23
24	272	65 S	1 530	107	12 S	111	65.1	8 S	45.0	24
25	270	70 S	1 630	101	12	105	81.3	10	70.2	25
26	254	60 S	1 320	95.1	12 S	98.6	79.9	12 S	82.8	26
27	224	40 S	774	89.5	10	77.3	82.1	10	70.9	27
28	224	35 S	677	83.3	8	57.6	79.0	7 S	47.8	28
29	201	28	486	77.0	7 S	46.6	74.2	5	32.1	29
30	168	21	305	80.4	9	62.5	62.3	5 S	26.9	30
31	180	21 S	327	91.5	9 S	71.2				31
TOTAL	14 234		325 619	3 929.7		7 816.3	2 472.1		1 852.7	TOTAL

E - ESTIMATED S - SAMPLE(S) COLLECTED THIS DAY

SOUTH SASKATCHEWAN RIVER AT HIGHWAY NO. 41 - STATION NO. 05AK001

SUSPENDED SEDIMENT FOR 1967

DAY	OCT DAILY DISCHARGE (M3/S)	OCT MEAN CONCENTRATION (MG/L)	OCT DAILY LOAD (TNE)	NOV DAILY DISCHARGE (M3/S)	NOV MEAN CONCENTRATION (MG/L)	NOV DAILY LOAD (TNE)	DEC DAILY DISCHARGE (M3/S)	DEC MEAN CONCENTRATION (MG/L)	DEC DAILY LOAD (TNE)	DAY
1	56.6	10 S	48.9	54.4	7	32.9	57.5 B	51	253	1
2	66.0	14	79.8	71.1	8 S	49.1	44.5 B	24 S	92.3	2
3	81.3	22 S	155	68.2	8	47.1	41.3 B	3	10.7	3
4	92.6	28	224	65.4	16 S	90.4	42.2 B	4	14.6	4
5	83.8	10 S	72.4	102	67	590	47.3 B	5	20.4	5
6	84.7	11	80.5	83.8	25	181	54.9 B	6	28.5	6
7	84.1	12 S	87.2	79.5	22 S	145	68.7 B	6	36.1	7
8	76.5	7 S	46.3	127	55	604	71.9 B	7	43.5	8
9	71.4	5	30.8	163	87	1 230	66.5 B	8 S	46.0	9
10	72.2	5 S	31.2	142	36	442	71.4 B	8	49.4	10
11	83.8	5	36.2	112	24 S	232	95.1 B	8	65.7	11
12	84.7	5 S	36.6	87.2	23	173	66.0 B	8	45.6	12
13	82.4	5	35.6	88.1	22	167	54.4 B	8	37.6	13
14	77.9	5 S	33.7	88.6	22	168	53.5 B	8	37.0	14
15	74.2	5 S	32.1	90.6	21	164	67.7 B	9	52.6	15
16	66.8	5	28.9	95.1	23	189	75.9 B	9 S	59.0	16
17	54.1	5	23.4	95.1	27	222	64.6 B	9	50.2	17
18	60.6	17 S	89.0	90.9	29 S	228	39.6 B	9	30.8	18
19	87.2	42	316	82.4	18	128	32.0 B	9	24.9	19
20	82.4	22	157	84.1	15	109	35.7 B	9 S	27.8	20
21	72.8	7 S	44.0	82.7	13	92.9	55.2 B	13	62.0	21
22	67.4	6 S	34.9	97.4 B	51	429	72.8 B	30	189	22
23	57.8	6	30.0	106 B	42	385	81.3 B	16 S	112	23
24	59.2	6 S	30.7	106 B	23	211	77.9 B	14	94.2	24
25	60.9	6	31.6	103 B	10 S	89.0	65.1 B	15	84.4	25
26	54.9	6	28.5	121 B	9	94.1	51.0 B	15	66.1	26
27	51.5	7	31.1	99.4 B	8	68.7	39.9 B	16	55.2	27
28	53.5	7 S	32.4	70.5 B	35	213	48.4 B	16	66.9	28
29	53.2	7 S	32.2	84.1 B	70	509	78.4 B	17 S	115	29
30	50.7	7	30.7	80.7	61	425	102 B	17	150	30
31	59.7	7 S	36.1				103 B	18	160	31
TOTAL	2 164.9		2 006.8	2 818.3		7 708.2	1 926.7		2 180.5	TOTAL

B - ICE CONDITIONS

S - SAMPLE(S) COLLECTED THIS DAY

SOUTH SASKATCHEWAN RIVER AT HIGHWAY NO. 41 - STATION NO. 05AK001

SUSPENDED SEDIMENT FOR 1968

LOCATION: LAT 50 44 15 N LONG 110 05 45 W
DRAINAGE AREA: 66 000 KM2
TYPE OF FLOW: REGULATED
TYPE OF GAUGE: MANUAL

TOTAL SUSPENDED SEDIMENT LOAD 1 180 000 TONNES FOR THE PERIOD JAN 01 TO DEC 31

REMARKS:

DAY	JAN DAILY DISCHARGE (M3/S)	JAN MEAN CONCENTRATION (MG/L)	JAN DAILY LOAD (TNE)	FEB DAILY DISCHARGE (M3/S)	FEB MEAN CONCENTRATION (MG/L)	FEB DAILY LOAD (TNE)	MAR DAILY DISCHARGE (M3/S)	MAR MEAN CONCENTRATION (MG/L)	MAR DAILY LOAD (TNE)	DAY
1	86.7 B	18	135	66.8 B	13	75.0	133 B	20	230	1
2	76.5 B	19	126	57.5 B	12	59.6	137 B	20 S	237	2
3	72.2 B	19	119	43.0 B	10	37.2	137 B	18	213	3
4	69.1 B	20	119	47.3 B	10	40.9	127 B	16	176	4
5	75.9 B	23	151	54.1 B	15 S	70.1	132 B	16	182	5
6	79.9 B	47	324	74.2 B	17	109	150 B	20	259	6
7	70.5 B	66	402	88.1 B	17	129	172 B	24	357	7
8	62.0 B	64	343	93.2 B	18	145	168 B	19	276	8
9	60.6 B	47 S	246	94.0 B	18 S	146	171 B	18 S	266	9
10	52.7 B	23	105	100 B	17 S	147	179 B	29	449	10
11	71.9 B	12	74.5	106 B	17	156	193 B	47	784	11
12	87.5 B	15	113	103 B	16	142	191 B	53	875	12
13	94.6 B	14 S	114	96.8 B	16	134	182 B	47	739	13
14	97.4 B	16	135	95.1 B	16	131	171 B	42	621	14
15	90.0 B	18	140	94.0 B	15	122	183 B	48	759	15
16	95.7 B	21	174	92.0 B	14 S	111	182 B	44 S	692	16
17	99.4 B	23	198	85.2 B	11	81.0	163 B	29	408	17
18	101 B	25	218	79.0 B	8	54.6	156 B	14	189	18
19	104 B	29 S	261	77.0 B	5	33.3	155 B	7 S	93.7	19
20	121 B	40	418	75.9 B	6	39.3	146 B	10	126	20
21	123 B	46	489	80.7 B	11	76.7	126 B	13	142	21
22	110 B	43	409	90.6 B	15	117	126 B	16	174	22
23	109 B	40	377	88.1 B	13	99.0	128 B	18 S	199	23
24	98.8 B	36	307	81.3 B	10 S	70.2	131	18	204	24
25	106 B	33	302	77.9 B	8	53.8	134	19	220	25
26	113 B	30	293	87.5 B	11	83.2	137 A	19	225	26
27	110 B	26	247	98.3 B	16	136	128	19	210	27
28	101 B	23	201	112 B	16	155	118	19	194	28
29	88.9 B	19	146	125 B	17	184	108	19	177	29
30	88.6 B	16 S	122				98.3 A	19 S	161	30
31	75.6 B	15	98.0				96.8	17	142	31
TOTAL	2 792.5		6 906.5	2 463.6		2 937.9	4 559.1		9 979.7	TOTAL

A - MANUAL GAUGE B - ICE CONDITIONS S - SAMPLE(S) COLLECTED THIS DAY

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SOUTH SASKATCHEWAN RIVER AT HIGHWAY NO. 41 - STATION NO. 05AK001

SUSPENDED SEDIMENT FOR 1968

DAY	APR DAILY DISCHARGE (M3/S)	APR MEAN CONCENTRATION (MG/L)	APR DAILY LOAD (TNE)	MAY DAILY DISCHARGE (M3/S)	MAY MEAN CONCENTRATION (MG/L)	MAY DAILY LOAD (TNE)	JUN DAILY DISCHARGE (M3/S)	JUN MEAN CONCENTRATION (MG/L)	JUN DAILY LOAD (TNE)	DAY
1	98.8	16	137	48.4	6	25.1	433	449 S	16 800	1
2	108	16 S	149	67.7	13 S	76.0	464	497 S	19 900	2
3	123	32	340	64.3	11	61.1	470	533 S	21 600	3
4	122	29 S	306	56.9	7 S	34.4	447	486 S	18 800	4
5	116	20	200	48.4	7	29.3	433	412 S	15 400	5
6	103	13 S	116	53.5	5 S	23.1	464	332 S	13 300	6
7	106	11	101	73.3	31	196	547	304 S	14 400	7
8	106	10	91.6	74.5	40 S	257	643	861 S	47 800	8
9	100	10 S	86.4	75.9	29	190	614	2 020 S	107 000	9
10	91.5	18 S	142	77.6	20 S	134	629	710 S	38 600	10
11	89.5	17 S	131	83.8	44	319	699	603 S	36 400	11
12	92.0	14	111	101	74 S	646	773	898 S	60 000	12
13	95.7	11 S	91.0	99.4	57 S	490	765	967 S	63 900	13
14	97.4	13	109	58.1	36	274	731	747 S	47 200	14
15	97.7	14 S	118	82.4	25 S	178	722	637 S	39 700	15
16	97.4	13	109	80.7	24	167	705	530 S	32 300	16
17	102	13 S	115	84.1	27 S	196	685	440 S	26 000	17
18	107	14	129	95.7	44	364	634	446 S	24 400	18
19	106	19 S	174	119	55 S	565	530	340 S	15 600	19
20	106	37	339	128	39	431	481	287 S	11 900	20
21	106	54 S	495	134	29 S	336	442	263 S	10 000	21
22	98.8	42	359	146	44	555	394	213 S	7 250	22
23	81.3	23 S	162	150	57 S	739	343	207 S	6 130	23
24	74.5	16	103	167	68	981	382	194 S	6 400	24
25	90.9	11 S	86.4	188	114 S	1 850	411	213	7 560	25
26	84.1	11	79.9	300	343 S	8 890	405	191 S	6 680	26
27	78.4	10 S	67.7	436	795 S	29 900	348	161 S	4 840	27
28	63.7	7	38.5	464	1 270 S	50 900	323	130 S	3 630	28
29	51.0	5 S	22.0	459	792 S	31 400	294	100	2 540	29
30	47.3	5	20.4	439	656 S	24 900	245	83 S	1 760	30
31				411	520 S	18 500				31
TOTAL	2 841.0		4 528.9	4 896.7		173 607.0	15 456		727 790	TOTAL

S - SAMPLE(S) COLLECTED THIS DAY

SOUTH SASKATCHEWAN RIVER AT HIGHWAY NO. 41 - STATION NO. 05AK001

SUSPENDED SEDIMENT FOR 1968

DAY	JUL DAILY DISCHARGE (M3/S)	JUL MEAN CONCENTRATION (MG/L)	JUL DAILY LOAD (TNE)	AUG DAILY DISCHARGE (M3/S)	AUG MEAN CONCENTRATION (MG/L)	AUG DAILY LOAD (TNE)	SEP DAILY DISCHARGE (M3/S)	SEP MEAN CONCENTRATION (MG/L)	SEP DAILY LOAD (TNE)	DAY
1	256	81 S	1 790	145	17 S	213	112	20 S	194	1
2	303	85 S	2 230	144	11	137	106	20	183	2
3	408	194 S	6 840	118	6	61.2	152	58	762	3
4	368	127 S	4 040	108	6	56.0	203	84	1 470	4
5	309	147 S	3 920	122	11 S	116	150	40 S	518	5
6	259	72 S	1 610	118	12	122	133	36	414	6
7	237	62	1 270	122	12 S	126	133	36	414	7
8	214	59 S	1 090	113	11	107	120	41 S	425	8
9	217	53 S	994	104	11 S	98.8	138	63	751	9
10	216	49 S	914	86.7	8	59.9	108	47 S	439	10
11	267	69 S	1 590	75.6	3 S	19.6	135	84	980	11
12	271	69	1 620	111	16	153	165	73	1 040	12
13	256	59 S	1 300	134	25 S	289	147	39	495	13
14	237	47 S	962	135	20	233	142	35 S	429	14
15	214	40	740	123	10 S	106	167	60	866	15
16	213	39 S	718	113	6	58.6	202	75	1 310	16
17	219	41	776	105	6 S	54.4	196	46 S	779	17
18	219	39 S	738	112	8 S	77.4	211	38	693	18
19	205	39	691	123	10	106	180	37	575	19
20	182	40 S	629	123	11 S	117	148	36	460	20
21	167	40 S	577	122	22	232	143	35	432	21
22	157	85	1 150	152	43 S	565	135	40 S	467	22
23	159	112 S	1 540	159	40	550	159	190	2 610	23
24	163	69 S	972	144	26 S	323	183	390 S	6 170	24
25	141	23 S	280	144	35 S	435	208	457	8 210	25
26	129	13 S	145	180	57	886	232	501 S	10 000	26
27	125	17	184	175	51	771	256	525	11 600	27
28	163	41	577	155	22 S	295	281	537 S	13 000	28
29	165	58	827	135	16 S	187	297	509	13 100	29
30	175	58 S	877	133	34 S	391	328	467 S	13 200	30
31	144	37	460	135	38	443				31
TOTAL	6 758		42 051	3 969.3		7 388.9	5 270		91 986	TOTAL

S - SAMPLE(S) COLLECTED THIS DAY

SOUTH SASKATCHEWAN RIVER AT HIGHWAY NO. 41 - STATION NO. 05AK001

SUSPENDED SEDIMENT FOR 1968

DAY	OCT DAILY DISCHARGE (M3/S)	OCT MEAN CONCENTRATION (MG/L)	OCT DAILY LOAD (TNE)	NOV DAILY DISCHARGE (M3/S)	NOV MEAN CONCENTRATION (MG/L)	NOV DAILY LOAD (TNE)	DEC DAILY DISCHARGE (M3/S)	DEC MEAN CONCENTRATION (MG/L)	DEC DAILY LOAD (TNE)	DAY
1	360	513 S	16 000	158	48 S	655	97.7 B	24	203	1
2	326	459	12 900	156	37 S	499	98.8 B	23	196	2
3	323	360 S	10 000	173	37	553	103 B	22	196	3
4	311	377	10 100	182	38 S	598	106 B	21	192	4
5	300	409 S	10 600	181	34	532	106 B	20	183	5
6	297	329	8 440	169	31	453	103 B	19	169	6
7	292	169 S	4 260	165	27 S	385	71.4 B	18	111	7
8	270	115	2 680	178	29	446	65.1 B	17	95.6	8
9	229	88 S	1 740	192	33 S	547	68.8 B	15	89.2	9
10	198	78	1 330	203	55	965	63.1 B	14	76.3	10
11	181	71 S	1 110	214	61 S	1 130	55.2 B	13	62.0	11
12	158	57 S	778	227	74	1 450	49.3 B	12	51.1	12
13	175	72	1 090	217	65 S	1 220	51.5 B	11	48.9	13
14	146	51 S	643	199	45	774	50.7 B	11	48.2	14
15	125	38	410	176	39 S	593	51.5 B	9	40.0	15
16	132	31 S	354	163	38 S	535	54.1 B	8	37.4	16
17	133	32	368	153	38	502	57.8 B	5 S	25.0	17
18	127	32 S	351	155	37	496	59.2 B	6	30.7	18
19	144	33 S	411	106	37	339	62.3 B	7	37.7	19
20	144	34	423	97.7	36	304	69.1 B	8 S	47.8	20
21	142	35 S	429	105	36	327	82.7 B	7	50.0	21
22	149	35 S	451	108	35 S	327	92.0 B	6	47.7	22
23	150	40 S	518	115	34	338	101 B	5 S	43.6	23
24	178	65	1 000	114	33	325	90.6 B	5	39.1	24
25	228	78 S	1 540	113	31	303	89.5 B	5	38.7	25
26	192	57 S	946	112	30	290	83.3 B	5	36.0	26
27	183	63	996	113	29	283	82.7 B	6	42.9	27
28	191	63	1 040	113	28	273	72.8 B	7	44.0	28
29	192	67 S	1 110	92.0	26	207	71.1 B	8	49.1	29
30	170	66	969	93.4	25	202	69.7 B	9	54.2	30
31	165	56 S	798				68.0 B	10	58.8	31
TOTAL	6 311		93 785	4 543.1		15 851	2 347.0		2 444.0	TOTAL

B - ICE CONDITIONS

S - SAMPLE(S) COLLECTED THIS DAY

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CALGARY, ALTA.

SOUTH SASKATCHEWAN RIVER AT HIGHWAY NO. 41 - STATION NO. 05AK001

SUSPENDED SEDIMENT FOR 1969

LOCATION: LAT 50 44 15 N LONG 110 05 45 W
DRAINAGE AREA: 66 000 KM2
TYPE OF FLOW: REGULATED
TYPE OF GAUGE: MANUAL

TOTAL SUSPENDED SEDIMENT LOAD 4 550 000 TONNES FOR THE PERIOD JAN 01 TO DEC 31

REMARKS:

DAY	JAN DAILY DISCHARGE (M3/S)	JAN MEAN CONCENTRATION (MG/L)	JAN DAILY LOAD (TNE)	FEB DAILY DISCHARGE (M3/S)	FEB MEAN CONCENTRATION (MG/L)	FEB DAILY LOAD (TNE)	MAR DAILY DISCHARGE (M3/S)	MAR MEAN CONCENTRATION (MG/L)	MAR DAILY LOAD (TNE)	DAY
1	66.5 B	10	57.5	104 B	15	135	82.4 B	13	92.6	1
2	64.8 B	9	50.4	94.9 B	16	131	82.4 B	12	85.4	2
3	63.1 B	9	49.1	94.6 B	16 S	131	80.4 B	11 S	76.4	3
4	61.4 B	9 S	47.7	94.0 B	16	130	79.3 B	12	82.2	4
5	66.5 B	10	57.5	93.4 B	16	129	80.7 B	12	83.7	5
6	67.4 B	11	64.1	92.6 B	15	120	86.1 B	13	96.7	6
7	62.3 B	12 S	64.6	95.7 B	15 S	124	86.7 B	14	105	7
8	72.2 B	12	74.9	104 B	15	135	79.0 B	15 S	102	8
9	90.0 B	12	93.3	108 B	14	131	71.4 B	15	92.5	9
10	92.0 B	11	87.4	106 B	14	128	65.1 B	15	84.4	10
11	102 B	11 S	96.9	94.0 B	14	114	61.4 B	15	79.6	11
12	116 B	11	110	86.1 B	14	104	63.7 B	15	82.6	12
13	121 B	11	115	80.4 B	14	97.3	69.9 B	15	90.6	13
14	129 B	11	123	77.9 B	14 S	94.2	68.8 B	15 S	89.2	14
15	125 B	11	119	78.4 B	14	94.8	63.1 B	18	98.1	15
16	103 B	11	97.9	79.9 B	13	89.7	53.5 B	21	97.1	16
17	101 B	11 S	96.0	77.0 B	13	86.5	49.0 B	24	102	17
18	102 B	11	96.9	75.0 B	13	84.2	56.6 B	27	132	18
19	102 B	11	96.9	75.0 B	12	77.8	106 B	31 S	284	19
20	101 B	11	96.0	83.8 B	12 S	86.9	156 B	34	458	20
21	96.8 B	11	92.0	90.9 B	15 S	118	228 B	37	729	21
22	101 B	11 S	96.0	88.1 B	16	122	286 B	197 S	4 870	22
23	83.8 B	11	79.6	80.4 B	15	104	309 B	1 050	28 000	23
24	92.3 B	11 S	87.7	76.5 B	15	99.1	280 B	1 480	35 800	24
25	96.8 B	12	100	76.5 B	15	99.1	255 B	1 210 S	26 700	25
26	96.8 B	12	100	81.8 B	15	106	261 B	877	19 800	26
27	101 B	13	113	81.3 B	14	98.3	229 B	548	10 800	27
28	110 B	13	124	76.5 B	14 S	92.5	212 B	274 S	5 020	28
29	103 B	14	125				239 B	188	3 880	29
30	106 B	14	128				269 B	166	3 860	30
31	106 B	15	137				269 B	155 S	3 600	31
TOTAL	2 901.7		2 876.4	2 446.7		3 062.4	4 378.5		145 473.1	TOTAL

B - ICE CONDITIONS

S - SAMPLE(S) COLLECTED THIS DAY

WATER SURVEY OF CANADA
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CALGARY, ALTA.

SOUTH SASKATCHEWAN RIVER AT HIGHWAY NO. 41 - STATION NO. 05AK001

SUSPENDED SEDIMENT FOR 1969

DAY	APR DAILY DISCHARGE (M3/S)	APR MEAN CONCENTRATION (MG/L)	APR DAILY LOAD (TNE)	MAY DAILY DISCHARGE (M3/S)	MAY MEAN CONCENTRATION (MG/L)	MAY DAILY LOAD (TNE)	JUN DAILY DISCHARGE (M3/S)	JUN MEAN CONCENTRATION (MG/L)	JUN DAILY LOAD (TNE)	DAY
1	232 B	225	4 510	268	302 S	6 990	564	492 S	24 000	1
2	239 B	376 S	7 760	234	218	4 410	498	346 S	14 900	2
3	256 B	665	14 700	283	151 S	3 690	501	294 S	12 700	3
4	411 B	1 010	35 900	232	130 S	2 610	476	254 S	10 400	4
5	450 B	1 370 S	53 300	357	243	7 500	416	207 S	7 440	5
6	575 B	1 690	84 000	377	252 S	8 210	371	207 S	6 640	6
7	561	1 820 S	88 200	351	212 S	6 430	371	170 S	5 450	7
8	558	1 600	77 100	317	177 S	4 850	547	302 S	14 300	8
9	564	1 250 S	60 900	340	183 S	5 380	597	436 S	22 500	9
10	527	979 S	44 600	343	205 S	6 080	716	642	39 700	10
11	490	855 S	36 200	362	219 S	6 850	745	855 S	55 000	11
12	402	829 S	28 800	357	197 S	6 080	694	944 S	56 600	12
13	360	709 S	22 100	371	162 S	5 190	592	612 S	31 300	13
14	340	543	16 000	405	233 S	8 150	501	412 S	17 800	14
15	326	417 S	11 700	456	273 S	10 800	535	380 S	17 600	15
16	326	354	9 970	530	554 S	25 400	561	328 S	15 900	16
17	314	333 S	9 030	592	885 S	45 300	510	241 S	10 600	17
18	294	311	7 900	648	548 S	30 700	450	191 S	7 430	18
19	264	290 S	6 610	592	594 S	30 400	391	172 S	5 810	19
20	247	303 S	6 470	575	622 S	30 900	348	127 S	3 820	20
21	218	203 S	3 820	544	476 S	22 400	297	115 S	2 950	21
22	227	197	3 860	507	357 S	15 600	279	73 S	1 760	22
23	232	192 S	3 850	459	269 S	10 700	314	96 S	2 600	23
24	210	155 S	2 810	442	246 S	9 390	453	177 S	6 930	24
25	193	152 S	2 530	422	234 S	8 530	510	152 S	6 700	25
26	191	157 S	2 590	391	192 S	6 490	510	250 S	11 000	26
27	217	167	3 130	382	186 S	6 140	487	175 S	7 360	27
28	297	188 S	4 820	405	208 S	7 280	946	594 S	48 600	28
29	311	233 S	6 260	504	322 S	14 000	1 470	2 860 S	363 000	29
30	314	401 S	10 900	620	546 S	29 200	1 440	3 290 S	409 000	30
31				609	670 S	35 300				31
TOTAL	10 146		670 320	13 275		420 950	17 090		1 239 790	TOTAL

B - ICE CONDITIONS

S - SAMPLE(S) COLLECTED THIS DAY

SOUTH SASKATCHEWAN RIVER AT HIGHWAY NO. 41 - STATION NO. 05AK001

SUSPENDED SEDIMENT FOR 1969

DAY	JUL DAILY DISCHARGE (M3/S)	JUL MEAN CONCENTRATION (MG/L)	JUL DAILY LOAD (TNE)	AUG DAILY DISCHARGE (M3/S)	AUG MEAN CONCENTRATION (MG/L)	AUG DAILY LOAD (TNE)	SEP DAILY DISCHARGE (M3/S)	SEP MEAN CONCENTRATION (MG/L)	SEP DAILY LOAD (TNE)	DAY
1	1 490 A	2 280 S	294 000	253	79 S	1 730	67.4	17	99.0	1
2	1 880 A	2 780 S	452 000	226	50 S	976	70.5	18 S	110	2
3	1 740 A	2 620 S	394 000	223	46 S	886	66.8	20	115	3
4	1 410 A	1 700 S	207 000	228	53 S	1 040	82.1	21	149	4
5	1 120	1 280 S	124 000	229	63 S	1 250	82.4	13	92.6	5
6	974	1 130 S	95 100	219	73 S	1 380	72.8	9 S	56.6	6
7	988	869 S	74 200	197	60 S	1 020	65.4	16 S	90.4	7
8	1 010	696 S	60 700	194	52 S	872	63.7	12	66.0	8
9	1 020	655 S	57 700	195	38 S	640	72.2	6 S	37.4	9
10	980	599 S	50 700	195	43 S	724	67.7	8	46.8	10
11	847	591 S	43 200	196	36 S	610	59.2	11 S	56.3	11
12	767	565 S	37 400	178 A	40 S	615	58.6	12	60.8	12
13	722	435 S	27 100	145 E	29 S	363	125	13 S	140	13
14	648	379 S	21 200	118 E	29 S	296	101	8	69.8	14
15	609	348 S	18 300	102 E	14	123	79.6	5 S	34.4	15
16	552	286 S	13 600	93.4 E	9 S	72.6	69.1	7	41.8	16
17	493	228 S	9 710	131 E	16 S	181	65.4	9 S	50.9	17
18	476	214 S	8 800	97.4 E	29	244	63.7	10	55.0	18
19	416	214 S	7 690	177 A	30 S	459	77.9	11	74.0	19
20	413	191 S	6 820	168	29	421	103	15 S	133	20
21	382	222 S	7 330	140	29 S	351	112	16	155	21
22	348	222 S	6 670	128	43	476	104	10	89.9	22
23	345	206 S	6 140	115	34 S	338	93.2	4 S	32.2	23
24	309	107 S	2 860	104	14 S	126	80.1	4 S	27.7	24
25	283	87 S	2 130	99.1	12	103	60.0	4 S	20.7	25
26	256	90 S	1 990	94.6	9	73.6	49.8	6	25.8	26
27	244	92	1 940	90.0	7 S	54.4	54.1	17 S	79.5	27
28	271	99 S	2 320	93.2	26 S	209	82.4	14 S	99.7	28
29	261	100 S	2 260	85.2	39	287	97.1	13	109	29
30	252	73 S	1 590	78.7	27 S	184	119	19 S	195	30
31	253	71 S	1 550	66.5	11 S	63.2				31
TOTAL	21 759		2 040 000	4 659.1		16 167.8	2 365.2		2 413.3	TOTAL

A - MANUAL GAUGE E - ESTIMATED S - SAMPLE(S) COLLECTED THIS DAY

SOUTH SASKATCHEWAN RIVER AT HIGHWAY NO. 41 - STATION NO. 05AK001

SUSPENDED SEDIMENT FOR 1969

DAY	OCT DAILY DISCHARGE (M3/S)	OCT MEAN CONCENTRATION (MG/L)	OCT DAILY LOAD (TNE)	NOV DAILY DISCHARGE (M3/S)	NOV MEAN CONCENTRATION (MG/L)	NOV DAILY LOAD (TNE)	DEC DAILY DISCHARGE (M3/S)	DEC MEAN CONCENTRATION (MG/L)	DEC DAILY LOAD (TNE)	DAY
1	95.4	10	82.4	119	29	298	63.1 B	18 S	98.1	1
2	90.0	12 S	93.3	114	32	315	64.0 B	17	94.0	2
3	78.2	15	101	108	38 S	355	62.6 B	17	91.9	3
4	75.9	19 S	125	105	44	399	62.3 B	16	86.1	4
5	85.8	30	222	110	44 S	418	62.0 B	15 S	80.4	5
6	81.6	18 S	127	111	36	345	60.3 B	14	72.9	6
7	74.2	14	89.8	110	20 S	190	58.0 B	13	65.1	7
8	78.2	12 S	81.1	106	15	137	56.6 B	12	58.7	8
9	75.0	13	84.2	104	13	117	54.7 B	11	52.0	9
10	74.2	13	83.3	106	12 S	110	53.0 B	11	50.4	10
11	66.8	14 S	80.8	108	14	131	53.0 B	10	45.8	11
12	60.6	14	73.3	105	15 S	136	53.5 B	9 S	41.6	12
13	56.1	15 S	72.7	97.7	17	144	54.4 B	9	42.3	13
14	54.4	14	65.8	97.7	19	160	56.1 B	9	43.6	14
15	54.1	15 S	70.1	94.6	20	163	57.5 B	9	44.7	15
16	71.4	27	167	94.0	22	179	59.5 B	8	41.1	16
17	73.6	21 S	134	81.0 B	24	168	63.7 B	7 S	38.5	17
18	74.5	18	116	65.4 B	25	141	56.6 B	14 S	68.5	18
19	77.9	18	121	66.0 B	27	154	56.6 B	20	97.8	19
20	76.7	17	113	67.4 B	29	169	60.0 B	20	104	20
21	73.3	16	101	64.6 B	30	167	57.5 B	18	89.4	21
22	76.7	15	99.4	62.3 B	32	172	63.7 B	15	82.6	22
23	127	36 S	395	62.3 B	34	183	63.1 B	13	70.9	23
24	153	77	1 020	62.3 B	34 S	183	63.1 B	10	54.5	24
25	125	47 S	508	62.9 B	31	168	62.3 B	8	43.1	25
26	99.1	32	274	63.1 B	24	131	62.3 B	7 S	37.7	26
27	96.6	25 S	209	62.6 B	18	97.4	65.7 B	13	73.8	27
28	100	22	190	65.1 B	12 S	67.5	69.4 B	17	102	28
29	103	22	196	62.9 B	14	76.1	71.1 B	19	117	29
30	114	22 S	217	62.3 B	17	91.5	77.3 B	18 S	120	30
31	116	25 S	251				78.2 B	16	108	31
TOTAL	2 658.3		5 563.2	2 600.2		5 565.5	1 901.2		2 216.5	TOTAL

B - ICE CONDITIONS

S - SAMPLE(S) COLLECTED THIS DAY

WATER SURVEY OF CANADA
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CALGARY, ALTA.

SOUTH SASKATCHEWAN RIVER AT HIGHWAY NO. 41 - STATION NO. 05AK001

SUSPENDED SEDIMENT FOR 1970

LOCATION: LAT 50 44 15 N LONG 110 05 45 W
DRAINAGE AREA: 66 000 KM2
TYPE OF FLOW: REGULATED
TYPE OF GAUGE: MANUAL

TOTAL SUSPENDED SEDIMENT LOAD 2 700 000 TONNES FOR THE PERIOD JAN 01 TO DEC 31

REMARKS:

DAY	JAN DAILY DISCHARGE (M3/S)	JAN MEAN CONCENTRATION (MG/L)	JAN DAILY LOAD (TNE)	FEB DAILY DISCHARGE (M3/S)	FEB MEAN CONCENTRATION (MG/L)	FEB DAILY LOAD (TNE)	MAR DAILY DISCHARGE (M3/S)	MAR MEAN CONCENTRATION (MG/L)	MAR DAILY LOAD (TNE)	DAY
1	80.4 B	14	97.3	62.9 B	10	54.3	88.3 B	15	114	1
2	81.0 B	6 S	42.0	62.3 B	10	53.8	78.7 B	14	95.2	2
3	75.6 B	4	26.1	59.2 B	10	51.1	72.8 B	12	75.5	3
4	67.7 B	5	29.2	58.6 B	9	45.6	70.5 B	11	67.0	4
5	65.4 B	5	28.3	59.7 B	9 S	46.4	73.3 B	9	57.0	5
6	64.6 B	6	33.5	66.0 B	9	51.3	75.0 B	8 S	51.8	6
7	63.1 B	7	38.2	71.1 B	8	49.1	73.3 B	9	57.0	7
8	62.9 B	8	43.5	71.1 B	8	49.1	68.8 B	10	59.4	8
9	64.6 B	8 S	44.7	69.1 B	8	47.8	66.0 B	11	62.7	9
10	64.6 B	8	44.7	62.3 B	8	43.1	66.0 B	11	62.7	10
11	63.7 B	7	38.5	62.3 B	8	43.1	75.0 B	13	84.2	11
12	64.3 B	7	38.9	68.2 B	7 S	41.2	80.4 B	15	104	12
13	64.3 B	6	33.3	77.9 B	7	47.1	93.4 B	17 S	137	13
14	65.4 B	5	28.3	75.6 B	7	45.7	104 B	19	171	14
15	66.0 B	4	22.8	71.4 B	7	43.2	95.4 B	20	165	15
16	66.5 B	4 S	23.0	69.7 B	7	42.2	87.8 B	22	167	16
17	66.0 B	4	22.8	69.1 B	7	41.8	83.5 B	24	173	17
18	65.1 B	5	28.1	68.8 B	7	41.6	83.5 B	25	180	18
19	64.3 B	5	27.8	68.2 B	7	41.2	83.8 B	27 S	195	19
20	62.3 B	5	26.9	67.4 B	7	40.8	88.6 B	27 S	207	20
21	61.4 B	5	26.5	73.3 B	7 S	44.3	98.0 B	27	229	21
22	61.4 B	6 S	31.8	85.2 B	8	58.9	99.7 B	27	233	22
23	55.2 B	5	23.8	93.4 B	9	72.6	102 B	28	247	23
24	49.8 B	5	21.5	95.4 B	10	82.4	107 B	28	259	24
25	45.0 B	5	19.4	96.0 B	11 S	91.2	112 B	28	271	25
26	48.1 B	5	20.8	98.0 B	14	119	122 B	29	306	26
27	52.4 B	5	22.6	100 B	17 S	147	130 B	29 S	326	27
28	56.1 B	6 S	29.1	98.5 B	16	136	127 B	27	296	28
29	57.8 B	10 S	49.9				121 B	25	261	29
30	60.6 B	11	57.6				119 B	24	247	30
31	61.4 B	10	53.0				123 B	22	234	31
TOTAL	1 947.0		1 073.9	2 080.7		1 670.9	2 868.8		5 194.5	TOTAL

B - ICE CONDITIONS

S - SAMPLE(S) COLLECTED THIS DAY

WATER SURVEY OF CANADA
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CALGARY, ALTA.

SOUTH SASKATCHEWAN RIVER AT HIGHWAY NO. 41 - STATION NO. 05AK001

SUSPENDED SEDIMENT FOR 1970

DAY	APR DAILY DISCHARGE (M3/S)		APR MEAN CONCENTRATION (MG/L)		APR DAILY LOAD (TNE)	MAY DAILY DISCHARGE (M3/S)		MAY MEAN CONCENTRATION (MG/L)		MAY DAILY LOAD (TNE)		JUN DAILY DISCHARGE (M3/S)		JUN MEAN CONCENTRATION (MG/L)		JUN DAILY LOAD (TNE)	DAY
1	125	B	22	S	238	122		25		264		487		745	S	31 300	1
2	124	B	39		418	104		19	S	171		433		453	S	16 900	2
3	122	B	74	S	780	83.0		16	S	115		379		298	S	9 760	3
4	111	B	110		1 050	91.5		13		103		326		246	S	6 930	4
5	110	B	146		1 390	105		13	S	118		269		213	S	4 950	5
6	115	B	172		1 710	107		9		83.2		311		176	S	4 730	6
7	109	B	151	S	1 420	104		13	S	117		362		241	S	7 540	7
8	120	B	73	S	757	155		50		670		481		295	S	12 300	8
9	182	B	130	S	2 040	161		102	S	1 420		544		425	S	20 000	9
10	182	A	194	S	3 050	279		142	S	3 420		527		417	S	19 000	10
11	149	A	103	S	1 330	351		244	S	7 400		527		561	S	25 500	11
12	204	A	87		1 530	365		558	S	17 600		498		695	S	29 900	12
13	176	A	86	S	1 310	368		542	S	17 200		493		591	S	25 200	13
14	167	A	74	S	1 070	348		396	S	11 900		496		443	S	19 000	14
15	163	E	42	S	591	328		314	S	8 900		428		990	S	36 600	15
16	160	E	53	S	733	292		272	S	6 860		623		2 290	S	123 000	16
17	156	E	52	S	701	297		259	S	6 650		1 290		3 740	S	417 000	17
18	152	E	58	S	762	297		253	S	6 490		1 340		3 450	S	399 000	18
19	149	E	51		657	283		218	S	5 330		1 230		2 110	S	224 000	19
20	145	E	42	S	526	343		236	S	6 990		1 280		1 440	S	159 000	20
21	141	A	39	S	475	453		506	S	19 800		1 110		1 150	S	110 000	21
22	137		41	S	485	453		842	S	33 000		886		958	S	73 300	22
23	119		32		329	439		801	S	30 400		765		805	S	53 200	23
24	105		19	S	172	413		568	S	20 300		688		628	S	37 300	24
25	93.4		21		169	430		524	S	19 500		620		627	S	33 600	25
26	112		20	S	194	447		483	S	18 700		572		430	S	21 300	26
27	102		22		194	467		533	S	21 500		527		405	S	18 400	27
28	140		43	S	520	459		537	S	21 300		515		876	S	39 000	28
29	146		47	S	593	479		581	S	24 000		481		371	S	15 400	29
30	138		38	S	453	530		607	S	27 800		467		708	S	28 600	30
31						544		877	S	41 200							31
TOTAL	4 154.4				25 647	9 697.5				379 301.2		18 955				2 021 710	TOTAL

A - MANUAL GAUGE B - ICE CONDITIONS E - ESTIMATED S - SAMPLE(S) COLLECTED THIS DAY

SOUTH SASKATCHEWAN RIVER AT HIGHWAY NO. 41 - STATION NO. 05AK001

SUSPENDED SEDIMENT FOR 1970

DAY	JUL DAILY DISCHARGE (M3/S)	JUL MEAN CONCENTRATION (MG/L)	JUL DAILY LOAD (TNE)	AUG DAILY DISCHARGE (M3/S)	AUG MEAN CONCENTRATION (MG/L)	AUG DAILY LOAD (TNE)	SEP DAILY DISCHARGE (M3/S)	SEP MEAN CONCENTRATION (MG/L)	SEP DAILY LOAD (TNE)	DAY
1	439	1 480 S	56 100	141	31 S	378	46.4	5	20.0	1
2	433	745 S	27 900	140	22	266	54.1	5 S	23.4	2
3	484	974 S	40 700	137	15 S	178	54.4	5	23.5	3
4	510	1 160 S	51 100	133	17 S	195	50.4	4	17.4	4
5	530	652 S	29 900	151	20 S	261	52.4	4 S	18.1	5
6	456	254 S	10 000	154	18 S	240	47.3	2 S	8.17	6
7	371	193 S	6 190	139	14	168	43.6	2	7.53	7
8	340 A	139 S	4 080	124	11 S	118	43.6	2 S	7.53	8
9	328 A	112 S	3 170	113	9 S	87.9	45.0	3 S	11.7	9
10	314 A	91 S	2 470	103	10 S	89.0	53.8	14 S	65.1	10
11	247 A	57 S	1 220	102	10	88.1	62.6	46	249	11
12	231 E	43 S	858	114	10	98.5	55.8	49 S	236	12
13	215 A	41 S	762	116	10 S	100	52.4	25 S	113	13
14	198 A	33 S	565	114	10	98.5	60.3	16	83.4	14
15	208	34 S	611	110	11 S	105	69.7	15 S	90.3	15
16	201	33 S	573	106	11 S	101	61.2	13	68.7	16
17	209	31 S	560	92.6	11	88.0	51.3	9 S	39.9	17
18	195	32 S	539	78.4	12	81.3	45.3	10	39.1	18
19	178	30 S	461	71.9	12	74.5	42.2	14 S	51.0	19
20	170	26 S	382	83.3	13	93.6	39.4	16	54.5	20
21	150	19 S	246	77.0	13	86.5	38.8	18 S	60.3	21
22	151	21 S	274	71.9	14	87.0	38.5	10 S	33.3	22
23	148	28 S	358	62.9	14 S	76.1	36.2	7	21.9	23
24	163	31 S	437	57.5	12	59.6	33.7	8	23.3	24
25	177	31 S	474	65.7	9	51.1	35.4	9	27.5	25
26	208	52 S	935	68.8	7 S	41.6	55.5	12 S	57.5	26
27	186	40 S	643	60.3	7 S	36.5	53.2	5 S	23.0	27
28	158	29 S	396	57.5	6	29.8	45.9	5 S	19.8	28
29	178	36 S	554	54.4	5 S	23.5	41.9	5 S	18.1	29
30	170	34 S	499	51.3	4 S	17.7	38.2	5 S	16.5	30
31	149	34 S	438	47.3	5	20.4				31
TOTAL	8 095		243 395	2 997.8		3 439.2	1 448.5		1 528.53	TOTAL

A - MANUAL GAUGE E - ESTIMATED S - SAMPLE(S) COLLECTED THIS DAY

WATER SURVEY OF CANADA
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CALGARY, ALTA.

SOUTH SASKATCHEWAN RIVER AT HIGHWAY NO. 41 - STATION NO. 05AK001

SUSPENDED SEDIMENT FOR 1970

DAY	OCT DAILY DISCHARGE (M3/S)	OCT MEAN CONCENTRATION (MG/L)	OCT DAILY LOAD (TNE)	NOV DAILY DISCHARGE (M3/S)	NOV MEAN CONCENTRATION (MG/L)	NOV DAILY LOAD (TNE)	DEC DAILY DISCHARGE (M3/S)	DEC MEAN CONCENTRATION (MG/L)	DEC DAILY LOAD (TNE)	DAY
1	36.5	4 S	12.6	133	25	287	35.4 B	10	30.6	1
2	37.1	6	19.2	130	20 S	225	43.0 B	10	37.2	2
3	37.7	7 S	22.8	130	18 S	202	43.0 B	10 S	37.2	3
4	38.2	6 S	19.8	121	15	157	44.7 B	11	42.5	4
5	42.2	8	29.2	114	11 S	108	50.4 B	16	69.7	5
6	65.1	15	84.4	108	7	65.3	59.7 B	28	144	6
7	65.4	16	90.4	98.5	5 S	42.6	77.0 B	47	313	7
8	72.5	15 S	94.0	102	7	61.7	65.7 B	33	187	8
9	71.6	14	86.6	111	11	105	62.3 B	22	118	9
10	65.1	10 S	56.2	132	24 S	274	66.0 B	29	165	10
11	58.9	7 S	35.6	130	40	449	77.0 B	41 S	273	11
12	53.8	7	32.5	122	53 S	559	85.0 B	29	213	12
13	50.7	8	35.0	117	44	445	86.9 B	10 S	75.1	13
14	50.4	8 S	34.8	125	28 S	302	87.2 B	9	67.8	14
15	65.7	7 S	39.7	117	28	283	89.5 B	9 S	69.6	15
16	79.0	7	47.8	118	31	316	88.3 B	9	68.7	16
17	79.6	7 S	48.1	122	33 S	348	82.4 B	8 S	57.0	17
18	79.3	12 S	82.2	128	29	321	79.0 B	8	54.6	18
19	125	27	292	133	23 S	264	71.4 B	8	49.4	19
20	103	22 S	196	109	20 S	188	64.6 B	7	39.1	20
21	86.4	17	127	91.5	17	134	59.2 B	7	35.8	21
22	87.8	13 S	98.6	92.3	14	112	61.4 B	6	31.8	22
23	92.3	14	112	64.6	11	61.4	65.1 B	6 S	33.7	23
24	93.7	17 S	138	77.6	8	53.6	65.7 B	8	45.4	24
25	107	19	176	49.6 B	4 S	17.1	67.4 B	9	52.4	25
26	104	20	180	41.1 B	6	21.3	70.5 B	10	60.9	26
27	109	22	207	32.6 B	8 S	22.5	83.8 B	11	79.6	27
28	130	23 S	258	36.0 B	8	24.9	103 B	13	116	28
29	132	25	285	32.3 B	9	25.1	118 B	14 S	143	29
30	131	27 S	306	34.3 B	9	26.7	127 B	17 S	187	30
31	135	28 S	327				115 B	16	159	31
TOTAL	2 485.0		3 573.5	2 952.4		5 501.2	2 294.6		3 056.1	TOTAL

B - ICE CONDITIONS

S - SAMPLE(S) COLLECTED THIS DAY

SOUTH SASKATCHEWAN RIVER AT HIGHWAY NO. 41 - STATION NO. 05AK001

SUSPENDED SEDIMENT FOR 1971

LOCATION: LAT 50 44 15 N LONG 110 05 45 W
DRAINAGE AREA: 66 000 KM2
TYPE OF FLOW: REGULATED
TYPE OF GAUGE: MANUAL

TOTAL SUSPENDED SEDIMENT LOAD 2 350 000 TONNES FOR THE PERIOD JAN 01 TO DEC 31

REMARKS:

DAY	JAN DAILY DISCHARGE (M3/S)	JAN MEAN CONCENTRATION (MG/L)	JAN DAILY LOAD (TNE)	FEB DAILY DISCHARGE (M3/S)	FEB MEAN CONCENTRATION (MG/L)	FEB DAILY LOAD (TNE)	MAR DAILY DISCHARGE (M3/S)	MAR MEAN CONCENTRATION (MG/L)	MAR DAILY LOAD (TNE)	DAY
1	93.4 B	15	121	61.7 B	14	74.6	102 B	19	167	1
2	97.7 B	14	118	64.0 B	14	77.4	84.4 B	16	117	2
3	86.4 B	12	89.6	75.9 B	18	118	74.2 B	14	89.8	3
4	77.9 B	10	67.3	86.7 B	19	142	67.1 B	11	63.8	4
5	73.6 B	9	57.2	83.0 B	19	136	58.6 B	9	45.6	5
6	73.6 B	7	44.5	73.9 B	18	115	56.1 B	6 S	29.1	6
7	70.8 B	6 S	36.7	72.5 B	18	113	50.1 B	5	21.6	7
8	65.1 B	6	33.7	68.8 B	17	101	47.0 B	4	16.2	8
9	58.0 B	6	30.1	65.4 B	15 S	84.8	51.0 B	6	26.4	9
10	54.7 B	5	23.6	70.2 B	13	78.8	56.4 B	18	87.7	10
11	52.4 B	5	22.6	69.7 B	12	72.3	62.0 B	27	145	11
12	52.4 B	4	18.1	62.6 B	10 S	54.1	69.1 B	30 S	179	12
13	58.0 B	7	35.1	60.0 B	12	62.2	77.3 B	29	194	13
14	96.6 B	11	91.8	54.1 B	18 S	84.1	82.1 B	28	199	14
15	97.7 B	12	101	61.7 B	27	144	90.0 B	25	194	15
16	74.2 B	11 S	70.5	78.7 B	38	258	99.1 B	21 S	180	16
17	69.4 B	10	60.0	118 B	52	530	113 B	20	195	17
18	62.3 B	8	43.1	157 B	69	936	123 B	21	223	18
19	60.9 B	7	36.8	213 B	88	1 620	135 B	26 S	303	19
20	60.9 B	8 S	42.1	279 B	93	2 240	155 B	35	469	20
21	60.9 B	8	42.1	237 B	82	1 680	157 B	37	502	21
22	63.7 B	8	44.0	189 B	71	1 160	146 B	33	416	22
23	66.5 B	8	46.0	146 B	62	782	142 B	25	307	23
24	68.0 B	7	41.1	122 B	51 S	538	131 B	16	181	24
25	66.5 B	7	40.2	115 B	39	388	121 B	10 S	105	25
26	62.3 B	7	37.7	110 B	27 S	257	103 B	10	89.0	26
27	59.5 B	7 S	36.0	107 B	24	222	95.7 B	10	82.7	27
28	60.9 B	10	52.6	108 B	21	196	83.8 B	9	65.2	28
29	70.2 B	13 S	78.8				82.7 B	10	71.5	29
30	75.0 B	14	90.7				88.9 B	32 S	246	30
31	66.0 B	14	79.8				123 B	45	478	31
TOTAL	2 155.5		1 731.8	3 009.9		12 264.3	2 926.6		5 488.6	TOTAL

B - ICE CONDITIONS

S - SAMPLE(S) COLLECTED THIS DAY

SOUTH SASKATCHEWAN RIVER AT HIGHWAY NO. 41 - STATION NO. 05AK001

SUSPENDED SEDIMENT FOR 1971

DAY	APR DAILY DISCHARGE (M3/S)	APR MEAN CONCENTRATION (MG/L)	APR DAILY LOAD (TNE)	MAY DAILY DISCHARGE (M3/S)	MAY MEAN CONCENTRATION (MG/L)	MAY DAILY LOAD (TNE)	JUN DAILY DISCHARGE (M3/S)	JUN MEAN CONCENTRATION (MG/L)	JUN DAILY LOAD (TNE)	DAY
1	120 B	53	550	260	170 S	3 820	799	1 430 S	98 700	1
2	162 B	69 S	966	229	153 S	3 030	830	1 290 S	92 500	2
3	176 B	118	1 790	212	130 S	2 380	886	1 460 S	112 000	3
4	186 B	164	2 640	212	118 S	2 160	852	1 480 S	109 000	4
5	172 B	378	5 620	200	115 S	1 990	801	969 S	67 100	5
6	214 B	606 S	11 200	207	104 S	1 860	779	819 S	55 100	6
7	198 B	311	5 320	238	103 S	2 120	796	729 S	50 100	7
8	212 B	237 S	4 340	303	125 S	3 270	906	827 S	64 700	8
9	214 B	278 S	5 140	399	286 S	9 860	1 120	1 480 S	143 000	9
10	222 B	266 S	5 100	445	569 S	21 900	1 200	1 640 S	170 000	10
11	391 B	945 S	31 900	445	696 S	26 800	1 150	1 310 S	130 000	11
12	450 A	997 S	38 800	456	591 S	23 300	1 090	981 S	92 400	12
13	391	700 S	23 600	442	508 S	19 400	949	795 S	65 200	13
14	326	577 S	16 300	413	575 S	20 500	858	649 S	48 100	14
15	279	501 S	12 100	453	528 S	20 700	767	606 S	40 200	15
16	241	389 S	8 100	532	704 S	32 400	719	511 S	31 700	16
17	203	283 S	4 960	566	887 S	43 400	663	497 S	28 500	17
18	189	144 S	2 350	544	878 S	41 300	580	362 S	18 100	18
19	203	172 S	3 020	493	703 S	29 900	580	316 S	15 800	19
20	204	196	3 450	447	440 S	17 000	535	256 S	11 800	20
21	185	200 S	3 200	442	349 S	13 300	493	232 S	9 880	21
22	163	194 S	2 730	399	312 S	10 800	396	171 S	5 850	22
23	147	163 S	2 070	365	232 S	7 320	382	170 S	5 610	23
24	130	120 S	1 350	360	206 S	6 410	388	149 S	4 990	24
25	130	68 S	764	374	207 S	6 690	365	122 S	3 850	25
26	185	114 S	1 820	399	226 S	7 790	351	121 S	3 670	26
27	223	142 S	2 740	425	284 S	10 400	402	168 S	5 840	27
28	208	107 S	1 920	507	361 S	15 800	430	182 S	6 760	28
29	272	185 S	4 350	620	598 S	32 000	411	144 S	5 110	29
30	289	206 S	5 140	691	856 S	51 100	416	123 S	4 420	30
31				765	1 230 S	81 300				31
TOTAL	6 685		213 330	12 843		570 000	20 894		1 499 980	TOTAL

A - MANUAL GAUGE B - ICE CONDITIONS S - SAMPLE(S) COLLECTED THIS DAY

SOUTH SASKATCHEWAN RIVER AT HIGHWAY NO. 41 - STATION NO. 05AK001

SUSPENDED SEDIMENT FOR 1971

DAY	JUL DAILY DISCHARGE (M3/S)	JUL MEAN CONCENTRATION (MG/L)	JUL DAILY LOAD (TNE)	AUG DAILY DISCHARGE (M3/S)	AUG MEAN CONCENTRATION (MG/L)	AUG DAILY LOAD (TNE)	SEP DAILY DISCHARGE (M3/S)	SEP MEAN CONCENTRATION (MG/L)	SEP DAILY LOAD (TNE)	DAY
1	402	117 S	4 060	187	11 S	178	82.1	9	63.8	1
2	368	111 S	3 530	172	9 S	134	86.7	9 S	67.4	2
3	331	100 S	2 860	172	9 S	134	79.9	7	48.3	3
4	282	85 S	2 070	183	11 S	174	73.1	3 S	18.9	4
5	255	67 S	1 480	164	8 S	113	68.0	2 S	11.8	5
6	237	53 S	1 090	168	7 S	102	71.6	3	18.6	6
7	233	50 S	1 010	159	5 S	68.7	74.2	5 S	32.1	7
8	237	52 S	1 060	150	3 S	38.9	69.9	5	30.2	8
9	232	38 S	762	140	8 S	96.8	64.8	4 S	22.4	9
10	222	38 S	729	134	15 S	174	56.1	3	14.5	10
11	206	35 S	623	142	17 S	209	50.4	2 S	8.71	11
12	187	27 S	436	134	15 S	174	51.0	3 S	13.2	12
13	180	28 S	435	119	17 S	175	48.4	3	12.5	13
14	179	27 S	418	116	14 S	140	46.4	2 S	8.02	14
15	199	33 S	567	119	11 S	113	46.7	3	12.1	15
16	198	31 S	530	153	16	212	48.4	5 S	20.9	16
17	189	26 S	425	156	20 S	270	48.4	7	29.3	17
18	182	25 S	393	127	17	187	56.1	8 S	38.8	18
19	183	22 S	348	108	14 S	131	65.4	9 S	50.9	19
20	167	23 S	332	93.7	13	105	58.3	9	45.3	20
21	153	26 S	344	94.3	14 S	114	53.5	8 S	37.0	21
22	164	18 S	255	90.6	16	125	51.0	8	35.3	22
23	181	22 S	344	95.4	17 S	140	48.4	8 S	33.5	23
24	207	27 S	483	101	15	131	45.6	6	23.6	24
25	206	31 S	552	88.3	11 S	83.9	45.9	4 S	15.9	25
26	184	24 S	382	78.7	10	68.0	47.0	3 S	12.2	26
27	210	21 S	381	71.4	12 S	74.0	47.9	4	16.6	27
28	210	24 S	435	69.4	9	54.0	49.8	5 S	21.5	28
29	231	21 S	419	64.3	6 S	33.3	50.7	4	17.5	29
30	212	16 S	293	85.8	6	44.5	46.7	2 S	8.07	30
31	179	15 S	232	88.6	8 S	61.2				31
TOTAL	6 806		27 278	3 824.5		3 858.3	1 732.4		788.90	TOTAL

S - SAMPLE(S) COLLECTED THIS DAY

SOUTH SASKATCHEWAN RIVER AT HIGHWAY NO. 41 - STATION NO. 05AK001

SUSPENDED SEDIMENT FOR 1971

DAY	OCT DAILY DISCHARGE (M3/S)	OCT MEAN CONCENTRATION (MG/L)	OCT DAILY LOAD (TNE)	NOV DAILY DISCHARGE (M3/S)	NOV MEAN CONCENTRATION (MG/L)	NOV DAILY LOAD (TNE)	DEC DAILY DISCHARGE (M3/S)	DEC MEAN CONCENTRATION (MG/L)	DEC DAILY LOAD (TNE)	DAY
1	44.5	3	11.5	72.5	22	138	27.5 B	12	28.5	1
2	43.9	8 S	30.3	90.0	26	202	41.6 B	17 S	61.1	2
3	72.8	7 S	44.0	123	32	340	42.5 B	18	66.1	3
4	59.7	4	20.6	76.5	23 S	152	43.9 B	18 S	68.3	4
5	49.8	7 S	30.1	156	34 S	458	45.3 B	17	66.5	5
6	47.0	13	52.8	121 B	40	418	48.4 B	15	62.7	6
7	46.2	15 S	59.9	108 B	34	317	52.1 B	14	63.0	7
8	46.2	9	35.9	63.1 B	29	158	52.4 B	14	63.4	8
9	45.9	6 S	23.8	36.0 B	24	74.6	48.4 B	12	50.2	9
10	45.3	5 S	19.6	24.4 B	23	48.5	39.1 B	11	37.2	10
11	43.9	5	19.0	37.4 B	29	93.7	39.1 B	10	33.8	11
12	43.0	6 S	22.3	71.4 B	41	253	43.9 B	9	34.1	12
13	43.9	7	26.6	135 E	52	607	58.3 B	8	40.3	13
14	46.7	8 S	32.3	146 E	55	694	63.1 B	7	38.2	14
15	51.0	9	39.7	144 E	37	460	51.5 B	5	22.2	15
16	51.3	8 S	35.5	131 E	31	351	38.2 B	5 S	16.5	16
17	53.8	6 S	27.9	127 E	27	296	43.3 B	7 S	26.2	17
18	54.7	6	28.4	126 E	22	240	45.3 B	8	31.3	18
19	56.6	9 S	44.0	114 E	19	187	47.9 B	9	37.2	19
20	88.1	14	107	105 E	17 S	154	37.1 B	9	28.8	20
21	77.3	21 S	140	113 E	21 S	205	35.4 B	10	30.6	21
22	93.4	26	210	119 E	21	216	37.9 B	10	32.7	22
23	86.1	21 S	156	118 E	20 S	204	51.8 B	11 S	49.2	23
24	77.3	16 S	107	110 E	17	162	48.1 B	10	41.6	24
25	82.1	15	106	114 E	14	138	55.8 B	10	48.2	25
26	113	21 S	205	110 E	10	95.0	63.7 B	10	55.0	26
27	127	31 S	340	76.5 E	6 S	39.7	68.0 B	10	58.8	27
28	128	34 S	376	82.4 E	6	42.7	73.6 B	9	57.2	28
29	115	30	298	60.9 E	6	31.6	76.5 B	9	59.5	29
30	87.2	27	203	31.4 B	6 S	16.3	76.5 B	9 S	59.5	30
31	73.1	25	158				76.5 B	11	72.7	31
TOTAL	2 093.8		3 010.2	2 942.5		6 792.1	1 572.7		1 440.6	TOTAL

B - ICE CONDITIONS E - ESTIMATED S - SAMPLE(S) COLLECTED THIS DAY

WATER SURVEY OF CANADA
SEP 03 1987 PAGE 24
CALGARY, ALTA.

SOUTH SASKATCHEWAN RIVER AT HIGHWAY NO. 41 - STATION NO. 05AK001

SUSPENDED SEDIMENT FOR 1972

LOCATION: LAT 50 44 15 N LONG 110 05 45 W
DRAINAGE AREA: 66 000 KM2
TYPE OF FLOW: REGULATED
TYPE OF GAUGE: MANUAL

TOTAL SUSPENDED SEDIMENT LOAD 4 720 000 TONNES FOR THE PERIOD JAN 01 TO DEC 31

REMARKS:

DAY	JAN DAILY DISCHARGE (M3/S)	JAN MEAN CONCENTRATION (MG/L)	JAN DAILY LOAD (TNE)	FEB DAILY DISCHARGE (M3/S)	FEB MEAN CONCENTRATION (MG/L)	FEB DAILY LOAD (TNE)	MAR DAILY DISCHARGE (M3/S)	MAR MEAN CONCENTRATION (MG/L)	MAR DAILY LOAD (TNE)	DAY
1	64.0 B	18	99.5	41.3 B	8	28.5	65.1 B	10	56.2	1
2	68.0 B	18	106	35.4 B	8	24.5	65.1 B	11	61.9	2
3	69.7 B	19	114	40.5 B	10	35.0	70.8 B	12	73.4	3
4	68.0 B	19 S	112	64.3 B	17 S	94.4	76.5 B	13 S	85.9	4
5	68.0 B	15	88.1	69.4 B	20	120	82.1 B	15	106	5
6	69.7 B	11 S	66.2	63.4 B	18	98.6	87.2 B	15	113	6
7	68.0 B	11	64.6	52.1 B	16	72.0	83.3 B	15	108	7
8	57.8 B	10	49.9	47.9 B	15	62.1	76.2 B	13	85.6	8
9	50.4 B	10	43.5	51.5 B	16	71.2	74.8 B	11 S	71.1	9
10	42.5 B	10	36.7	59.7 B	18	92.8	74.8 B	12	77.6	10
11	36.8 B	9	28.6	60.0 B	19 S	98.5	77.6 B	14	93.9	11
12	33.1 B	9	25.7	56.4 B	18	87.7	91.2 B	19	150	12
13	33.1 B	9	25.7	53.0 B	17	77.8	103 B	25	222	13
14	36.5 B	8	25.2	55.8 B	17	82.0	129 B	32	357	14
15	49.6 B	8 S	34.3	61.4 B	16	84.9	193 B	40	667	15
16	52.7 B	9	41.0	65.7 B	15	85.1	249 B	71 S	1 530	16
17	69.1 B	12	71.6	67.7 B	15	87.7	464 B	781 S	31 300	17
18	73.6 B	14	89.0	69.1 B	14 S	83.6	467 B	4 180 S	169 000	18
19	61.4 B	13	69.0	68.5 B	13	76.9	462 B	1 630 S	65 100	19
20	51.0 B	10	44.1	59.7 B	12	61.9	467 B	922 S	37 200	20
21	51.3 B	7	31.0	54.9 B	12	56.9	470 B	974 S	39 600	21
22	61.2 B	5 S	26.4	63.1 B	11	60.0	467 E	1 030 S	41 600	22
23	66.3 B	5	28.6	64.8 B	10	56.0	476	929 S	38 200	23
24	56.6 B	4	19.6	67.4 B	9 S	52.4	453	760 S	29 700	24
25	61.4 B	4	21.2	65.7 B	9 S	51.1	368	627 S	19 900	25
26	63.4 B	3	16.4	60.6 B	9	47.1	345	489 S	14 600	26
27	65.1 B	3 S	16.9	53.8 B	9	41.8	351	586 S	17 800	27
28	57.2 B	6 S	29.7	65.1 B	9	50.6	320	480 S	13 300	28
29	59.7 B	10	51.6	65.1 B	10	56.2	283	462 S	11 300	29
30	64.0 B	11	60.8				259	329 S	7 360	30
31	51.3 B	9	39.9				249	223 S	4 800	31
TOTAL	1 780.5		1 576.8	1 703.3		1 997.3	7 499.7		544 618.6	TOTAL

B - ICE CONDITIONS E - ESTIMATED S - SAMPLE(S) COLLECTED THIS DAY

WATER SURVEY OF CANADA
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CALGARY, ALTA.

SOUTH SASKATCHEWAN RIVER AT HIGHWAY NO. 41 - STATION NO. 05AK001

SUSPENDED SEDIMENT FOR 1972

DAY	APR DAILY DISCHARGE (M3/S)	APR MEAN CONCENTRATION (MG/L)	APR DAILY LOAD (TNE)	MAY DAILY DISCHARGE (M3/S)	MAY MEAN CONCENTRATION (MG/L)	MAY DAILY LOAD (TNE)	JUN DAILY DISCHARGE (M3/S)	JUN MEAN CONCENTRATION (MG/L)	JUN DAILY LOAD (TNE)	DAY
1	232	177 S	3 550	215	126 S	2 340	799	932 S	64 300	1
2	228	214 S	4 220	267	186 S	4 290	898	1 110 S	86 100	2
3	219	257 S	4 860	306	236 S	6 240	1 090	1 990 S	187 000	3
4	246	407 S	8 650	303	204 S	5 340	1 220	2 480 S	261 000	4
5	234	195 S	3 940	303	192 S	5 030	1 260	2 350 S	256 000	5
6	228	198 S	3 900	303	177 S	4 630	1 190	1 630 S	168 000	6
7	219	206 S	3 900	303	140 S	3 670	1 120	1 260 S	122 000	7
8	220	181 S	3 440	303	318 S	8 320	1 060	1 050 S	96 200	8
9	261	178 S	4 010	300	255 S	6 610	1 040	986 S	88 600	9
10	425	615 S	22 600	294	185 S	4 700	1 020	1 030 S	90 800	10
11	365	716 S	22 600	283	237 S	5 790	1 000	1 000 S	86 400	11
12	314	761 S	20 600	280	602 S	14 600	1 040	965 S	86 700	12
13	274	642 S	15 200	328	164 S	4 650	1 140	1 340 S	132 000	13
14	243	392 S	8 230	323	185 S	5 160	1 140	1 140 S	112 000	14
15	225	256 S	4 980	303	347 S	9 080	1 110	816 S	78 300	15
16	216	186 S	3 470	314	244 S	6 620	1 010	847 S	73 900	16
17	213	153 S	2 820	428	344 S	12 700	920	789 S	62 700	17
18	214	145 S	2 680	614	1 180 S	62 600	838	755 S	54 700	18
19	214	127 S	2 350	705	2 190 S	133 000	719	642 S	39 900	19
20	206	110 S	1 960	711	1 990 S	122 000	697	620 S	37 300	20
21	194	104 S	1 740	691	1 670 S	99 700	691	578 S	34 500	21
22	172	123 S	1 830	699	1 300 S	78 500	671	458 S	26 600	22
23	172	136 S	2 020	739	1 010 S	64 500	648	485 S	27 200	23
24	176	149 S	2 270	767	987 S	65 400	620	488 S	26 100	24
25	170	114 S	1 670	810	958 S	67 000	606	583 S	30 500	25
26	179	117 S	1 810	818	1 200 S	84 800	586	439 S	22 200	26
27	178	80 S	1 230	827	1 070 S	76 500	614	431 S	22 900	27
28	177	77 S	1 180	915	1 120 S	88 500	640	537 S	29 700	28
29	170	94 S	1 380	892	1 410 S	109 000	637	367 S	20 200	29
30	183	110 S	1 740	810	989 S	69 200	575	428 S	21 300	30
31				782 A	815 S	55 100				31
TOTAL	6 767		164 830	15 936		1 285 570	26 599		2 445 100	TOTAL

A - MANUAL GAUGE

S - SAMPLE(S) COLLECTED THIS DAY

SOUTH SASKATCHEWAN RIVER AT HIGHWAY NO. 41 - STATION NO. 05AK001

SUSPENDED SEDIMENT FOR 1972

DAY	JUL DAILY DISCHARGE (M3/S)	JUL MEAN CONCENTRATION (MG/L)	JUL DAILY LOAD (TNE)	AUG DAILY DISCHARGE (M3/S)	AUG MEAN CONCENTRATION (MG/L)	AUG DAILY LOAD (TNE)	SEP DAILY DISCHARGE (M3/S)	SEP MEAN CONCENTRATION (MG/L)	SEP DAILY LOAD (TNE)	DAY
1	558	401 S	19 300	388	141 S	4 730	216	25 S	467	1
2	524	305 S	13 800	362	101 S	3 160	208	25 S	449	2
3	521	271 S	12 200	343	113 S	3 350	189	25 S	408	3
4	498	237 S	10 200	328	126 S	3 570	186	16 S	257	4
5	493	208 S	8 860	311	76 S	2 040	205	27 S	478	5
6	535	251 S	11 600	303	74 S	1 940	190	16 S	263	6
7	578	294 S	14 700	328	159 S	4 510	173	10 S	149	7
8	501	230 S	9 960	297	233 S	5 980	146	8 S	101	8
9	394	180 S	6 130	286	126 S	3 110	133	4 S	46.0	9
10	303	152 S	3 980	262	49 S	1 110	132	12 S	137	10
11	272	88 S	2 070	247	44 S	939	142	11	135	11
12	297	101 S	2 590	244	47 S	991	204	13 S	229	12
13	385	176 S	5 850	244	41 S	864	206	19 S	338	13
14	439	195 S	7 400	247	39 S	832	183	18 S	285	14
15	422	175 S	6 380	244	33 S	696	173	14 S	209	15
16	365	95 S	3 000	221	27 S	516	167	17 S	245	16
17	311	91 S	2 450	254	45 S	988	147	15 S	191	17
18	303	76 S	1 990	231	32 S	639	139	14 S	168	18
19	317	67 S	1 840	201	72 S	1 250	125	13 S	140	19
20	331	65 S	1 860	209	133 S	2 400	133	14 S	161	20
21	368	87 S	2 770	212	37 S	678	171	26 S	384	21
22	419	111 S	4 020	187	24 S	388	161	27 S	376	22
23	456	143 S	5 630	175	29 S	438	126	30 S	327	23
24	476	142 S	5 840	179	37 S	572	109	28 S	264	24
25	479	174 S	7 200	206	39 S	694	108	28	261	25
26	473	162 S	6 620	207	70 S	1 250	147	43 S	546	26
27	439	171 S	6 490	204	37 S	652	134	41	475	27
28	402	115	3 990	214	33 S	610	123	39 S	414	28
29	428	118 S	4 360	244	56 S	1 180	125	37	400	29
30	450	186	7 230	244	57 S	1 200	116	32	321	30
31	399	161 S	5 550	218	34 S	640				31
TOTAL	13 136		205 860	7 840		51 917	4 717		8 624.0	TOTAL

S - SAMPLE(S) COLLECTED THIS DAY

SOUTH SASKATCHEWAN RIVER AT HIGHWAY NO. 41 - STATION NO. 05AK001

SUSPENDED SEDIMENT FOR 1972

DAY	OCT DAILY DISCHARGE (M3/S)	OCT MEAN CONCENTRATION (MG/L)	OCT DAILY LOAD (TNE)	NOV DAILY DISCHARGE (M3/S)	NOV MEAN CONCENTRATION (MG/L)	NOV DAILY LOAD (TNE)	DEC DAILY DISCHARGE (M3/S)	DEC MEAN CONCENTRATION (MG/L)	DEC DAILY LOAD (TNE)	DAY
1	118	24 S	245	149	14 S	180	77.9	13	87.5	1
2	141	15	183	161	14 S	195	77.3 B	11 S	73.5	2
3	161	16 S	223	159	16 S	220	59.5 B	9	46.3	3
4	152	11 S	144	150	19 S	246	73.1 B	7	44.2	4
5	133	7	80.4	141	19	231	53.8 B	5 S	23.2	5
6	132	4 S	45.6	144	13 S	162	42.5 B	5	18.4	6
7	132	6	68.4	147	11	140	34.8 B	5 S	15.0	7
8	164	9 S	128	143	11 S	136	30.9 B	5	13.3	8
9	157	7 S	95.0	131	9	102	31.4 B	5	13.6	9
10	136	8	94.0	121	8 S	83.6	31.7 B	6	16.4	10
11	130	11 S	124	115	7	69.6	31.7 B	6	16.4	11
12	134	10	116	131	8 S	90.5	31.7 B	6	16.4	12
13	140	5 S	60.5	155	13	174	32.3 B	6 S	16.7	13
14	128	4	44.2	157	14 S	190	38.2 B	9	29.7	14
15	117	3 S	30.3	144	9	112	45.3 B	13	50.9	15
16	128	4	44.2	151	5 S	65.2	55.2 B	16 S	76.3	16
17	177	16 S	245	157	5	67.8	56.6 B	20	97.8	17
18	192	24 S	398	150	7 S	90.7	62.3 B	23	124	18
19	178	16 S	246	154	10 S	133	68.0 B	26	153	19
20	140	11	133	123	10 S	106	73.6 B	30 S	191	20
21	120	10 S	104	109	4 S	37.7	80.4 B	34	236	21
22	116	6 S	60.1	98.0	4 S	33.9	85.0 B	37	272	22
23	148	19	243	87.2	5 S	37.7	90.6 B	39	305	23
24	163	15 S	211	87.5	5	37.8	96.3 B	39	324	24
25	147	5	63.5	101	5 S	43.6	101 B	33	288	25
26	138	4 S	47.7	84.4	9 S	65.6	103 B	20	178	26
27	135	4	46.7	97.4	8 S	67.3	101 B	8 S	69.8	27
28	133	8 S	91.9	76.5	14 S	92.5	99.1 B	7	59.9	28
29	133	8 S	91.9	64.8	17	95.2	97.7 B	7	59.1	29
30	142	11	135	58.9	16 S	81.4	96.3 B	7	58.2	30
31	153	14 S	185				94.6 B	7	57.2	31
TOTAL	4 418		4 027.4	3 747.7		3 387.1	2 052.8		3 030.8	TOTAL

B - ICE CONDITIONS

S - SAMPLE(S) COLLECTED THIS DAY

WATER SURVEY OF CANADA
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CALGARY, ALTA.

SOUTH SASKATCHEWAN RIVER AT HIGHWAY NO. 41 - STATION NO. 05AK001

SUSPENDED SEDIMENT FOR 1973

LOCATION: LAT 50 44 15 N LONG 110 05 45 W
DRAINAGE AREA: 66 000 KM2
TYPE OF FLOW: REGULATED
TYPE OF GAUGE: MANUAL

TOTAL SUSPENDED SEDIMENT LOAD 720 000 TONNES FOR THE PERIOD JAN 01 TO DEC 31

REMARKS:

DAY	JAN DAILY DISCHARGE (M3/S)	JAN MEAN CONCENTRATION (MG/L)	JAN DAILY LOAD (TNE)	FEB DAILY DISCHARGE (M3/S)	FEB MEAN CONCENTRATION (MG/L)	FEB DAILY LOAD (TNE)	MAR DAILY DISCHARGE (M3/S)	MAR MEAN CONCENTRATION (MG/L)	MAR DAILY LOAD (TNE)	DAY
1	93.4 B	7	56.5	105 B	12	109	109 B	12	113	1
2	102 B	7	61.7	104 B	13	117	110 B	13 S	124	2
3	96.3 B	7	58.2	99.1 B	13	111	118 B	14	143	3
4	88.9 B	7	53.8	93.4 B	14	113	120 B	14	145	4
5	83.8 B	7	50.7	87.8 B	14	106	123 B	15	159	5
6	78.7 B	6	40.8	92.9 B	15	120	130 B	15	168	6
7	85.0 B	5	36.7	103 B	15 S	133	135 B	16	187	7
8	70.5 B	4	24.4	106 B	16	147	133 B	16	184	8
9	60.6 B	3	15.7	106 B	16	147	136 B	17 S	200	9
10	51.3 B	2 S	8.86	95.1 B	13	107	131 B	20	226	10
11	46.7 B	2	8.07	78.7 B	10	68.0	132 B	22	251	11
12	58.6 B	2	10.1	65.1 B	8	45.0	133 B	23	264	12
13	62.0 B	2	10.7	62.9 B	8	43.5	129 B	22	245	13
14	57.8 B	2	9.99	67.4 B	8 S	46.6	133 B	20	230	14
15	69.7 B	2	12.0	70.8 B	8	48.9	135 B	18 S	210	15
16	72.5 B	8	50.1	82.7 B	10	71.5	135 B	17	198	16
17	78.7 B	18 S	122	91.2 B	14	110	142 B	20	245	17
18	95.7 B	26	215	92.3 B	14	112	127 B	22	241	18
19	101 B	30	262	92.9 B	14	112	119 B	22 S	226	19
20	93.4 B	28	226	90.0 B	14	109	139 B	23	276	20
21	94.6 B	25	204	94.0 B	15 S	122	146 B	12	151	21
22	84.4 B	21	153	105 B	18	163	160 B	21 S	290	22
23	77.6 B	18	121	108 B	21	196	184 B	30	477	23
24	79.9 B	15 S	104	103 B	22	196	160 B	12 S	166	24
25	81.6 B	14	98.7	95.7 B	21	174	141 B	12	146	25
26	86.1 B	13	96.7	88.3 B	19 S	145	147 B	24 S	305	26
27	84.4 B	13	94.8	92.3 B	12 S	95.7	176 B	19 S	289	27
28	83.8 B	12	86.9	106 B	11	101	200	27 S	467	28
29	85.5 B	12	88.6				193	69	1 150	29
30	94.6 B	11 S	89.9				197	100 S	1 700	30
31	97.7 B	12	101				189	87 S	1 420	31
TOTAL	2 496.8		2 571.92	2 578.6		3 169.2	4 462		10 596	TOTAL

B - ICE CONDITIONS

S - SAMPLE(S) COLLECTED THIS DAY

SOUTH SASKATCHEWAN RIVER AT HIGHWAY NO. 41 - STATION NO. 05AK001

SUSPENDED SEDIMENT FOR 1973

DAY	APR DAILY DISCHARGE (M3/S)	APR MEAN CONCENTRATION (MG/L)	APR DAILY LOAD (TNE)	MAY DAILY DISCHARGE (M3/S)	MAY MEAN CONCENTRATION (MG/L)	MAY DAILY LOAD (TNE)	JUN DAILY DISCHARGE (M3/S)	JUN MEAN CONCENTRATION (MG/L)	JUN DAILY LOAD (TNE)	DAY
1	174	82	1 230	118	20	204	493	482 S	20 500	1
2	169	78 S	1 140	123	20 S	213	453	421 S	16 500	2
3	153	66	872	135	24	280	416	370 S	13 300	3
4	160	54 S	746	144	26 S	323	405	324 S	11 300	4
5	156	53 S	714	133	21 S	241	433	352 S	13 200	5
6	111	41 S	393	161	32	445	428	331 S	12 200	6
7	143	47 S	581	164	31 S	439	419	356 S	12 900	7
8	151	50	652	156	26	350	360	307 S	9 550	8
9	126	46 S	501	142	24 S	294	297	253 S	6 490	9
10	127	42	461	188	54	877	320	252 S	6 970	10
11	130	38 S	427	214	68 S	1 260	377	313 S	10 200	11
12	124	33	354	211	56 S	1 020	459	340 S	13 500	12
13	115	29 S	288	226	61	1 190	473	417 S	17 000	13
14	109	38 S	358	196	51 S	864	442	414 S	15 800	14
15	109	53	499	178	38 S	584	436	470 S	17 700	15
16	123	62 S	659	161	25 S	348	374	888 S	28 700	16
17	143	62	766	143	18	222	368	1 450 S	46 100	17
18	142	47 S	577	129	15 S	167	430	824 S	30 600	18
19	141	39	475	146	16 S	202	487	725 S	30 500	19
20	141	37 S	451	213	53	975	476	805 S	33 100	20
21	140	54 S	653	300	116 S	3 010	411	376 S	13 400	21
22	125	46	497	385	256 S	8 520	394	303	10 300	22
23	123	32 S	340	462	525 S	21 000	365	276 S	8 700	23
24	127	31	340	473	530 S	21 700	374	231 S	7 460	24
25	115	32 S	318	442	462 S	17 600	345	212 S	6 320	25
26	104	30 S	270	374	333 S	10 800	328	162 S	4 590	26
27	91.2	27 S	213	303	252 S	6 600	343	173 S	5 130	27
28	75.3	26 S	169	286	178 S	4 400	399	199 S	6 860	28
29	76.5	20	132	278	135	3 240	464	334 S	13 400	29
30	102	20 S	176	402	274 S	9 520	513	367 S	16 300	30
31				532	564 S	25 900				31
TOTAL	3 826.0		15 252	7 518		142 788	12 282		458 570	TOTAL

S - SAMPLE(S) COLLECTED THIS DAY

SOUTH SASKATCHEWAN RIVER AT HIGHWAY NO. 41 - STATION NO. 05AK001

SUSPENDED SEDIMENT FOR 1973

DAY	JUL DAILY DISCHARGE (M3/S)	JUL MEAN CONCENTRATION (MG/L)	JUL DAILY LOAD (TNE)	AUG DAILY DISCHARGE (M3/S)	AUG MEAN CONCENTRATION (MG/L)	AUG DAILY LOAD (TNE)	SEP DAILY DISCHARGE (M3/S)	SEP MEAN CONCENTRATION (MG/L)	SEP DAILY LOAD (TNE)	DAY
1	476	309 S	12 700	97.4	11 S	92.6	48.4	4 S	16.7	1
2	450	265 S	10 300	99.4	9	77.3	45.6	6 S	23.6	2
3	416	254 S	9 130	94.0	11 S	89.3	45.6	6	23.6	3
4	402	238 S	8 270	116	23 S	231	45.3	5 S	19.6	4
5	371	282 S	9 040	114	19	187	45.6	4	15.8	5
6	362	168 S	5 250	91.7	10 S	79.2	45.0	3 S	11.7	6
7	317	136 S	3 720	83.8	12	86.9	44.2	3	11.5	7
8	297	130 S	3 340	75.3	19 S	124	58.6	6 S	30.4	8
9	278	96 S	2 310	85.0	24	176	84.4	7	51.0	9
10	271	81	1 900	89.2	20 S	154	85.0	6	44.1	10
11	244	81 S	1 710	92.0	13 S	103	77.0	4 S	26.6	11
12	233	81	1 630	94.6	13	106	60.8	3	15.8	12
13	218	74 S	1 390	89.5	14 S	108	102	11 S	96.9	13
14	215	63 S	1 170	85.5	14 S	103	131	24	272	14
15	197	53	902	84.1	13 S	94.5	127	18 S	198	15
16	154	42 S	559	74.5	12	77.2	106	11 S	101	16
17	128	43	476	62.0	12 S	64.3	79.9	6	41.4	17
18	156	40 S	539	71.4	17 S	105	54.7	4 S	18.9	18
19	138	33	393	85.0	21	154	47.3	4	16.3	19
20	112	23 S	223	77.3	20 S	134	44.7	8 S	30.9	20
21	112	18 S	174	55.5	16	76.7	48.4	11	46.0	21
22	111	17	163	60.9	22 S	116	53.8	9 S	41.8	22
23	92.3	14 S	112	62.3	44	237	48.4	7 S	29.3	23
24	143	20	247	56.1	38 S	184	41.1	7	24.9	24
25	130	24 S	270	53.8	29 S	135	45.3	7 S	27.4	25
26	123	20 S	213	49.6	14	60.0	47.0	8	32.5	26
27	115	20 S	199	45.6	4 S	15.8	39.1	7 S	23.6	27
28	130	21 S	236	48.7	4 S	16.8	37.1	6	19.2	28
29	125	23	248	49.6	4	17.1	40.2	7 S	24.3	29
30	102	18 S	159	49.8	4 S	17.2	57.5	7 S	34.8	30
31	99.7	15	129	49.6	4	17.1				31
TOTAL	6 718.0		77 102	2 343.2		3 239.0	1 836.1		1 369.6	TOTAL

5 - SAMPLE(S) COLLECTED THIS DAY

SOUTH SASKATCHEWAN RIVER AT HIGHWAY NO. 41 - STATION NO. 05AK001

SUSPENDED SEDIMENT FOR 1973

DAY	OCT DAILY DISCHARGE (M3/S)	OCT MEAN CONCENTRATION (MG/L)	OCT DAILY LOAD (TNE)	NOV DAILY DISCHARGE (M3/S)	NOV MEAN CONCENTRATION (MG/L)	NOV DAILY LOAD (TNE)	DEC DAILY DISCHARGE (M3/S)	DEC MEAN CONCENTRATION (MG/L)	DEC DAILY LOAD (TNE)	DAY
1	46.4	6	24.1	80.1	13	90.0	119 B	11	113	1
2	37.7	7 S	22.8	83.0	8 S	57.4	108 B	11	103	2
3	34.5	7	20.9	85.8	9	66.7	106 B	11	101	3
4	34.0	6 S	17.6	75.6	9	58.8	92.3 B	11	87.7	4
5	33.1	7	20.0	62.0	9	48.2	95.7 B	11	91.0	5
6	32.3	8 S	22.3	53.5 B	8	37.0	101 B	10	87.3	6
7	32.3	7	19.5	51.0 B	9 S	39.7	95.7 B	10 S	82.7	7
8	32.0	3 S	8.29	41.6 B	9	32.3	90.6 B	10	78.3	8
9	35.1	2	6.07	19.8 B	8	13.7	108 B	10	93.3	9
10	41.1	2 S	7.10	19.8 B	8	13.7	88.9 B	10	76.8	10
11	42.5	3	11.0	21.0 B	8	14.5	82.7 B	10	71.5	11
12	44.7	4 S	15.4	32.6 B	7	19.7	87.8 B	10	75.9	12
13	51.5	2 S	8.90	30.0 B	7	18.1	97.1 B	9	75.5	13
14	52.4	2	9.05	35.7 B	7	21.6	97.7 B	9	76.0	14
15	48.7	3 S	12.6	45.9 B	7 S	27.8	99.1 B	9 S	77.1	15
16	44.2	6	22.9	50.4 B	6	26.1	88.3 B	8	61.0	16
17	42.2	4 S	14.6	60.3 B	6 S	31.3	78.7 B	8	54.4	17
18	43.6	2	7.53	79.3 B	6	41.1	65.1 B	8	45.0	18
19	45.3	3 S	11.7	79.9 B	6	41.4	65.1 B	7 S	39.4	19
20	106	26 S	238	84.4 B	5	36.5	63.4 B	8	43.8	20
21	72.5	16	100	87.8 B	5 S	37.9	58.6 B	10 S	50.6	21
22	65.7	10 S	56.8	85.5 B	4	29.5	54.7 B	10	47.3	22
23	79.9	12	82.8	66.5 B	3	17.2	90.6 B	10	78.3	23
24	96.6	16	134	74.2 B	11 S	70.5	90.0 B	11	85.5	24
25	102	19 S	167	74.8 B	13	84.0	76.5 B	11	72.7	25
26	94.0	14	114	72.5 B	13	81.4	70.8 B	11 S	67.3	26
27	83.8	11 S	79.6	71.4 B	12	74.0	85.0 B	11	80.8	27
28	100	17 S	147	85.0 B	12	88.1	91.7 B	11	87.2	28
29	89.5	20 S	155	92.9 B	12 S	96.3	76.5 B	11	72.7	29
30	87.2	23 S	173	101 B	12	105	71.9 B	11	68.3	30
31	74.5	18	116				66.3 B	11	63.0	31
TOTAL	1 825.3		1 845.54	1 903.3		1 419.5	2 662.8		2 307.4	TOTAL

B - ICE CONDITIONS

S - SAMPLE(S) COLLECTED THIS DAY

WATER SURVEY OF CANADA
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CALGARY, ALTA.

SOUTH SASKATCHEWAN RIVER AT HIGHWAY NO. 41 - STATION NO. 05AK001

SUSPENDED SEDIMENT FOR 1974

LOCATION: LAT 50 44 15 N LONG 110 05 45 W
DRAINAGE AREA: 66 000 KM2
TYPE OF FLOW: REGULATED
TYPE OF GAUGE: MANUAL

TOTAL SUSPENDED SEDIMENT LOAD 4 090 000 TONNES FOR THE PERIOD JAN 01 TO DEC 31

REMARKS:

DAY	JAN DAILY DISCHARGE (M3/S)	JAN MEAN CONCENTRATION (MG/L)	JAN DAILY LOAD (TNE)	FEB DAILY DISCHARGE (M3/S)	FEB MEAN CONCENTRATION (MG/L)	FEB DAILY LOAD (TNE)	MAR DAILY DISCHARGE (M3/S)	MAR MEAN CONCENTRATION (MG/L)	MAR DAILY LOAD (TNE)	DAY
1	68.0 B	4	23.5	99.1 B	20	171	76.5 B	32	212	1
2	78.2 B	4	27.0	97.1 B	19	159	77.0 B	28	186	2
3	78.2 B	4 S	27.0	90.6 B	18	141	78.2 B	24	162	3
4	64.6 B	5	27.9	84.4 B	18 S	131	75.9 B	21	138	4
5	58.6 B	6	30.4	80.4 B	18	125	78.2 B	19 S	128	5
6	49.3 B	7	29.8	70.2 B	17	103	77.0 B	18	120	6
7	43.6 B	7	26.4	60.6 B	17	89.0	82.1 B	18	128	7
8	42.5 B	8	29.4	62.0 B	18	96.4	94.0 B	21	171	8
9	43.3 B	9 S	33.7	77.0 B	19	126	98.5 B	22	187	9
10	42.5 B	10	36.7	83.3 B	20	144	90.6 B	22	172	10
11	41.6 B	10	35.9	87.8 B	21 S	159	92.9 B	23	185	11
12	42.5 B	11	40.4	98.5 B	24	204	107 B	27	250	12
13	41.9 B	11	39.8	113 B	29	283	97.7 B	26	219	13
14	44.2 B	12	45.8	113 B	32	312	88.9 B	25	192	14
15	45.9 B	12	47.6	103 B	32	285	97.7 B	26	219	15
16	46.7 B	13 S	52.5	96.3 B	30	250	93.4 B	24	194	16
17	48.4 B	14	58.5	95.1 B	29	238	110 B	27	257	17
18	62.3 B	14	75.4	86.1 B	28 S	208	120 B	27	280	18
19	78.2 B	15	101	86.7 B	24 S	180	116 B	28 S	281	19
20	78.7 B	15	102	87.8 B	24	182	116 B	25 S	251	20
21	81.0 B	16 S	112	99.1 B	28	240	115 B	25	248	21
22	81.6 B	16	113	108 B	34	317	116 B	24	241	22
23	82.7 B	14 S	100	108 B	37	345	118 B	25	255	23
24	89.5 B	15	116	92.9 B	37	297	120 B	28	290	24
25	94.6 B	18	147	80.4 B	37 S	257	136 B	22 S	259	25
26	97.7 B	19	160	87.8 B	38	288	134 B	13	151	26
27	102 B	21	185	94.0 B	39	317	130 B	12	135	27
28	105 B	22 S	200	89.5 B	36	278	127 B	15	165	28
29	108 B	23	215				130 B	66 S	741	29
30	108 B	23	215				130 B	103	1 160	30
31	103 B	21	187				128 B	94	1 040	31
TOTAL	2 152.3		2 640.7	2 531.7		5 925.4	3 251.6		8 617	TOTAL

B - ICE CONDITIONS

S - SAMPLE(S) COLLECTED THIS DAY

SOUTH SASKATCHEWAN RIVER AT HIGHWAY NO. 41 - STATION NO. 05AK001

SUSPENDED SEDIMENT FOR 1974

DAY	APR DAILY DISCHARGE (M3/S)	APR MEAN CONCENTRATION (MG/L)	APR DAILY LOAD (TNE)	MAY DAILY DISCHARGE (M3/S)	MAY MEAN CONCENTRATION (MG/L)	MAY DAILY LOAD (TNE)	JUN DAILY DISCHARGE (M3/S)	JUN MEAN CONCENTRATION (MG/L)	JUN DAILY LOAD (TNE)	DAY
1	123 B	81 S	861	490	2 120 S	89 800	663	914 S	52 400	1
2	123 B	82	871	490	1 150 S	48 700	617	729 S	38 900	2
3	206 B	69	1 230	496	1 400 S	60 000	575	622 S	30 900	3
4	241 B	56 S	1 170	637	6 360 S	350 000	547	824 S	38 900	4
5	242 B	53	1 110	643	2 300 S	128 000	518	427 S	19 100	5
6	226 B	51	996	530	1 310 S	60 000	569	1 060 S	52 100	6
7	219 B	51	965	433	1 100 S	41 200	660	672 S	38 300	7
8	226 B	50	976	425	638 S	23 400	665	778 S	44 700	8
9	205 B	52	921	419	514 S	18 600	640	813 S	45 000	9
10	216 B	149	2 780	476	549 S	22 600	620	549 S	29 400	10
11	227 B	381 S	7 470	561	820	39 700	660	521 S	29 700	11
12	236 B	331	6 750	623	1 240 S	66 700	623	556 S	29 900	12
13	218 B	271 S	5 100	586	1 080 S	54 700	575	476 S	23 600	13
14	351 B	506	15 300	515	681 S	30 300	552	382 S	18 200	14
15	303 B	782 S	20 500	464	534 S	21 400	606	482 S	25 200	15
16	256	476	10 500	459	414 S	16 400	762	782 S	51 500	16
17	240	400 S	8 290	405	312 S	10 900	872	1 330 S	100 000	17
18	229	393 S	7 780	399	332 S	11 400	966	1 580 S	132 000	18
19	204	289 S	5 090	362	309 S	9 660	1 050	1 590 S	144 000	19
20	199	257	4 420	343	237 S	7 020	1 210	1 970 S	206 000	20
21	209	213 S	3 850	345	217 S	6 470	1 230	1 860 S	198 000	21
22	196	169	2 860	394	346 S	11 800	1 190	1 590 S	163 000	22
23	212	182 S	3 330	394	216 S	7 350	1 170	2 130 S	215 000	23
24	201	153	2 660	405	501 S	17 500	1 140	1 140 S	112 000	24
25	189	112 S	1 830	408	500 S	17 600	1 100	1 110 S	105 000	25
26	168	123	1 790	399	265 S	9 140	1 090	965 S	90 900	26
27	209	306 S	5 530	411	282 S	10 000	1 040	796 S	71 500	27
28	202	350 S	6 110	436	283 S	10 700	997	955 S	82 300	28
29	251	433	9 390	507	424 S	18 600	983	737 S	62 600	29
30	362	1 410 S	44 100	651	994 S	55 900	949	602 S	49 400	30
31				680	1 100 S	64 600				31
TOTAL	6 689		184 530	14 786		1 340 140	24 839		2 299 500	TOTAL

B - ICE CONDITIONS

S - SAMPLE(S) COLLECTED THIS DAY

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CALGARY, ALTA.

SOUTH SASKATCHEWAN RIVER AT HIGHWAY NO. 41 - STATION NO. 05AK001

SUSPENDED SEDIMENT FOR 1974

DAY	JUL DAILY DISCHARGE (M3/S)	JUL MEAN CONCENTRATION (MG/L)	JUL DAILY LOAD (TNE)	AUG DAILY DISCHARGE (M3/S)	AUG MEAN CONCENTRATION (MG/L)	AUG DAILY LOAD (TNE)	SEP DAILY DISCHARGE (M3/S)	SEP MEAN CONCENTRATION (MG/L)	SEP DAILY LOAD (TNE)	DAY
1	830	538 S	38 600	180	21 S	327	144	9 S	112	1
2	711	744 S	45 700	161	18	250	144	8	99.5	2
3	657	381 S	21 600	160	16 S	221	142	7 S	85.9	3
4	614	303 S	16 100	165	17 S	242	135	7	81.6	4
5	572	285 S	14 100	161	17	236	123	6 S	63.8	5
6	538	286 S	13 300	151	17 S	222	140	9	109	6
7	507	253 S	11 100	154	16	213	119	8 S	82.3	7
8	456	257 S	10 100	162	17 S	238	103	6 S	53.4	8
9	413	205 S	7 320	167	17	245	97.1	5	41.9	9
10	374	174 S	5 620	177	20 S	306	93.4	4 S	32.3	10
11	382	162 S	5 350	177	22 S	336	90.9	3	23.6	11
12	362	238 S	7 440	181	74	1 160	94.9	4	32.8	12
13	326	162 S	4 560	185	143	2 290	101	4 S	34.9	13
14	281	121 S	2 940	166	113 S	1 620	120	4 S	41.5	14
15	309	130 S	3 470	146	21 S	265	103	3 S	26.7	15
16	320	169 S	4 670	153	24	317	112	4	38.7	16
17	334	98 S	2 830	192	31 S	514	128	5 S	55.3	17
18	297	97 S	2 490	233	40 S	805	123	4	42.5	18
19	300	64 S	1 660	263	62	1 410	132	4 S	45.6	19
20	286	49 S	1 210	222	42 S	806	124	4	42.9	20
21	277	48 S	1 150	209	33	596	114	4 S	39.4	21
22	279	52	1 250	190	25 S	410	100	4 S	34.6	22
23	280	55 S	1 330	154	16	213	117	5	50.5	23
24	280	50	1 210	147	11 S	140	126	5 S	54.4	24
25	292	57 S	1 440	156	13 S	175	113	5	48.8	25
26	276	47	1 120	182	17	267	92.6	4 S	32.0	26
27	274	42	994	178	16 S	246	70.2	4	24.3	27
28	261	36 S	812	168	15	218	62.3	4	21.5	28
29	237	28	573	146	13 S	164	60.9	4 S	21.0	29
30	205	24 S	425	146	11	139	68.5	3 S	17.8	30
31	197	25 S	426	153	11 S	145				31
TOTAL	11 727		230 890	5 385		14 736	3 293.8		1 490.5	TOTAL

S - SAMPLE(S) COLLECTED THIS DAY

SOUTH SASKATCHEWAN RIVER AT HIGHWAY NO. 41 - STATION NO. 05AK001

SUSPENDED SEDIMENT FOR 1974

DAY	OCT DAILY DISCHARGE (M3/S)	OCT MEAN CONCENTRATION (MG/L)	OCT DAILY LOAD (TNE)	NOV DAILY DISCHARGE (M3/S)	NOV MEAN CONCENTRATION (MG/L)	NOV DAILY LOAD (TNE)	DEC DAILY DISCHARGE (M3/S)	DEC MEAN CONCENTRATION (MG/L)	DEC DAILY LOAD (TNE)	DAY
1	70.2	3 S	18.2	104	8	71.9	66.3 B	29 S	166	1
2	62.3	3	16.1	99.1	5 S	42.8	62.3 B	22	118	2
3	56.9	7 S	34.4	94.0	7 S	56.9	53.0 B	13 S	59.5	3
4	58.3	9	45.3	93.4	7	56.5	39.9 B	12	41.4	4
5	67.4	7 S	40.8	92.3	7 S	55.8	53.0 B	22 S	101	5
6	70.5	5 S	30.5	90.6	8	62.6	65.7 B	15	85.1	6
7	83.0	7	50.2	89.2	8 S	61.7	86.1 B	5 S	37.2	7
8	70.8	5 S	30.6	85.8	7 S	51.9	83.8 B	6	43.4	8
9	60.3	3	15.6	85.2	7	51.5	91.2 B	16 S	126	9
10	67.7	4 S	23.4	85.0	7 S	51.4	81.6 B	16	113	10
11	68.8	5	29.7	85.0	7	51.4	74.8 B	13 S	84.0	11
12	64.3	4 S	22.2	85.2	7 S	51.5	74.8 B	16	103	12
13	53.5	5 S	23.1	84.4	6	43.8	77.6 B	15 S	101	13
14	54.9	5	23.7	83.3	6 S	43.2	73.6 B	13	82.7	14
15	58.9	4 S	20.4	81.3	8 S	56.2	70.2 B	9	54.6	15
16	61.4	4	21.2	68.8	15	89.2	66.3 B	7 S	40.1	16
17	56.9	4	19.7	69.4	31 S	186	65.1 B	5 S	28.1	17
18	54.9	3	14.2	73.1 B	19	120	63.4 B	5	27.4	18
19	56.9	2 S	9.83	78.7 B	6 S	40.8	67.4 B	4 S	23.3	19
20	57.2	3 S	14.8	85.5 B	6	44.3	77.0 B	4	26.6	20
21	57.5	3	14.9	77.0 B	8 S	53.2	75.3 B	4	26.0	21
22	57.8	3 S	15.0	78.7 B	8	54.4	79.3 B	4	27.4	22
23	79.0	4	27.3	75.9 B	7 S	45.9	77.6 B	4	26.8	23
24	110	9 S	85.5	71.4 B	7	43.2	66.3 B	4	22.9	24
25	108	9	84.0	53.5 B	6	27.7	38.5 B	4	13.3	25
26	91.5	8	63.2	50.4 B	7 S	30.5	38.2 B	4	13.2	26
27	93.2	8	64.4	48.4 B	17	71.1	47.9 B	4	16.6	27
28	101	7 S	61.1	62.3 B	31 S	167	69.7 B	4 S	24.1	28
29	103	6 S	53.4	63.4 B	35	192	71.9 B	4	24.8	29
30	104	6 S	53.9	62.9 B	33 S	179	51.0 B	4	17.6	30
31	104	8 S	71.9				40.8 B	4	14.1	31
TOTAL	2 264.1		1 098.53	2 357.2		2 153.4	2 049.6		1 688.2	TOTAL

B - ICE CONDITIONS

S - SAMPLE(S) COLLECTED THIS DAY

WATER SURVEY OF CANADA
SEP 03 1987 PAGE 36
CALGARY, ALTA.

SOUTH SASKATCHEWAN RIVER AT HIGHWAY NO. 41 - STATION NO. 05AK001

SUSPENDED SEDIMENT FOR 1975

LOCATION: LAT 50 44 15 N LONG 110 05 45 W
DRAINAGE AREA: 66 000 KM2
TYPE OF FLOW: REGULATED
TYPE OF GAUGE: MANUAL

TOTAL SUSPENDED SEDIMENT LOAD 7 450 000 TONNES FOR THE PERIOD JAN 01 TO DEC 31

REMARKS:

DAY	JAN DAILY DISCHARGE (M3/S)	JAN MEAN CONCENTRATION (MG/L)	JAN DAILY LOAD (TNE)	FEB DAILY DISCHARGE (M3/S)	FEB MEAN CONCENTRATION (MG/L)	FEB DAILY LOAD (TNE)	MAR DAILY DISCHARGE (M3/S)	MAR MEAN CONCENTRATION (MG/L)	MAR DAILY LOAD (TNE)	DAY
1	42.8 B	4	14.8	65.4 B	9	50.9	76.5 B	10	66.1	1
2	71.3 B	4	24.8	64.3 B	9	50.0	85.0 B	11	80.8	2
3	71.9 B	4 S	24.8	63.1 B	8	43.6	94.6 B	12	98.1	3
4	65.1 B	3	16.9	62.0 B	8 S	42.9	102 B	12 S	106	4
5	48.7 B	2	8.42	61.4 B	6	31.8	101 B	12	105	5
6	46.7 B	1	4.03	61.2 B	5 S	26.4	95.7 B	11 S	91.0	6
7	73.6 B	2 S	12.7	61.2 B	6	31.7	92.3 B	11	87.7	7
8	68.5 B	1	5.92	60.3 B	7	36.5	92.3 B	11	87.7	8
9	66.3 B	2	11.5	65.1 B	7	39.4	89.5 B	10	77.3	9
10	64.0 B	2	11.1	58.9 B	9	45.8	87.8 B	9	68.3	10
11	62.9 B	2	10.9	53.5 B	10	46.2	88.9 B	8	61.4	11
12	62.6 B	2	10.8	50.4 B	11	47.9	93.4 B	9	72.6	12
13	89.2 B	2	15.4	49.6 B	12	51.4	98.5 B	11 S	93.6	13
14	109 B	2	18.8	49.3 B	13 S	55.4	94.0 B	10	81.2	14
15	101 B	2	17.5	54.4 B	14	65.8	86.7 B	11	82.4	15
16	103 B	2 S	17.8	55.5 B	13	62.3	79.3 B	14	95.9	16
17	94.0 B	2	16.2	55.2 B	12	57.2	70.8 B	18	110	17
18	82.7 B	2	14.3	56.1 B	12	58.2	70.8 B	21	128	18
19	77.3 B	2	13.4	56.9 B	11	54.1	76.5 B	23 S	152	19
20	70.8 B	2	12.2	56.9 B	10 S	49.2	82.7 B	22	157	20
21	65.7 B	2	11.4	56.9 B	9	44.2	85.0 B	19	140	21
22	65.1 B	2	11.2	60.3 B	9	46.9	89.5 B	17	131	22
23	64.8 B	2	11.2	67.4 B	8	46.6	90.6 B	15	117	23
24	61.7 B	2	10.7	69.7 B	8	48.2	90.0 B	13 S	101	24
25	59.7 B	2	10.3	69.7 B	7	42.2	86.7 B	12	89.9	25
26	62.9 B	3	16.3	69.7 B	7 S	42.2	90.6 B	15	117	26
27	62.9 B	4	21.7	69.7 B	8	48.2	88.9 B	22 S	169	27
28	61.2 B	5 S	26.4	71.4 B	9	55.5	88.3 B	25	191	28
29	58.0 B	5	25.1				90.6 B	26	204	29
30	62.0 B	8	42.9				92.3 B	25	199	30
31	66.8 B	10	57.7				92.9 B	22	177	31
TOTAL	2 162.8		527.17	1 695.5		1 320.7	2 743.7		3 538.0	TOTAL

B - ICE CONDITIONS

S - SAMPLE(S) COLLECTED THIS DAY

WATER SURVEY OF CANADA
SEP 03 1987 PAGE 37
CALGARY, ALTA.

SOUTH SASKATCHEWAN RIVER AT HIGHWAY NO. 41 - STATION NO. 05AK001

SUSPENDED SEDIMENT FOR 1975

DAY	APR DAILY DISCHARGE (M3/S)	APR MEAN CONCENTRATION (MG/L)	APR DAILY LOAD (TNE)	MAY DAILY DISCHARGE (M3/S)	MAY MEAN CONCENTRATION (MG/L)	MAY DAILY LOAD (TNE)	JUN DAILY DISCHARGE (M3/S)	JUN MEAN CONCENTRATION (MG/L)	JUN DAILY LOAD (TNE)	DAY
1	86.7 B	19	142	433	740 S	27 700	371	303 S	9 710	1
2	82.1 B	15	106	348	919 S	27 600	394	395 S	13 400	2
3	82.7 B	11 S	78.6	286	898 S	22 200	436	319 S	12 000	3
4	82.7 B	10	71.5	242	605	12 600	504	408 S	17 800	4
5	85.0 B	9	66.1	221	446 S	8 520	541	490 S	22 900	5
6	83.3 B	7	50.4	218	411	7 740	609	609 S	32 000	6
7	72.5 B	5	31.3	256	518 S	11 500	680	780 S	45 800	7
8	75.9 B	5	32.8	278	790	19 000	716	872 S	53 900	8
9	84.4 B	5	36.5	292	699 S	17 600	776	1 170 S	78 400	9
10	83.8 B	7	50.7	311	479 S	12 900	767	1 220 S	80 800	10
11	78.7 B	12 S	81.6	422	636 S	23 200	748	945 S	61 100	11
12	76.5 B	27	178	490	1 030 S	43 600	705	703 S	42 800	12
13	79.3 B	46	315	527	1 140 S	51 900	626	545	29 500	13
14	81.0 B	61	427	515	1 140 S	50 700	580	500	25 100	14
15	81.0 B	69	483	493	878 S	37 400	572	497 S	24 600	15
16	78.2 B	68	459	527	760 S	34 600	580	483 S	24 200	16
17	82.7 B	54 S	386	561	1 050 S	50 900	606	490 S	25 700	17
18	94.6 B	57 S	466	617	1 170 S	62 400	609	532 S	28 000	18
19	123 B	210	2 230	626	1 190 S	64 400	614	701 S	37 200	19
20	179 B	447 S	6 910	697	1 510 S	90 900	634	729 S	39 900	20
21	172 B	632	9 390	697	1 250 S	75 300	821	1 160 S	82 300	21
22	261 B	815	18 400	665	974 S	56 000	1 530	3 420 S	452 000	22
23	249 B	1 390	29 900	654	940 S	53 100	2 690	8 100 S	1 880 000	23
24	281 B	1 710 S	41 500	617	734 S	39 100	2 550	4 870 S	1 070 000	24
25	264	1 000 S	22 800	561	698 S	33 800	1 850	2 960 S	473 000	25
26	385	1 170 S	38 900	524	578 S	26 200	1 470	2 300 S	292 000	26
27	337	1 060 S	30 900	504	470	20 500	1 260 A	1 790 S	195 000	27
28	317	739 S	20 200	467	365 S	14 700	1 150 E	1 510 S	150 000	28
29	317	532 S	14 600	428	302 S	11 200	1 090 E	1 300 S	122 000	29
30	362	547 S	17 100	385	277 S	9 210	997 E	1 080 S	93 000	30
31				368	258 S	8 200				31
TOTAL	4 718.1		256 291.5	14 230		1 024 670	27 476		5 514 110	TOTAL

A - MANUAL GAUGE B - ICE CONDITIONS E - ESTIMATED S - SAMPLE(S) COLLECTED THIS DAY

SOUTH SASKATCHEWAN RIVER AT HIGHWAY NO. 41 - STATION NO. 05AK001

SUSPENDED SEDIMENT FOR 1975

DAY	JUL DAILY DISCHARGE (M3/S)	JUL MEAN CONCENTRATION (MG/L)	JUL DAILY LOAD (TNE)	AUG DAILY DISCHARGE (M3/S)	AUG MEAN CONCENTRATION (MG/L)	AUG DAILY LOAD (TNE)	SEP DAILY DISCHARGE (M3/S)	SEP MEAN CONCENTRATION (MG/L)	SEP DAILY LOAD (TNE)	DAY
1	895 E	965 S	74 600	119	92	946	112	18	174	1
2	801 E	984 S	68 100	122	113 S	1 190	114	23 S	227	2
3	657 E	670 S	38 000	161	102 S	1 420	112	28	271	3
4	580 E	573 S	28 700	190	89	1 460	109	30 S	283	4
5	507 E	418 S	18 300	186	96 S	1 540	108	23	215	5
6	467 E	332 S	13 400	208	109	1 960	110	15 S	143	6
7	496 E	356 S	15 300	185	86 S	1 370	122	18 S	190	7
8	586 A	452 S	22 900	165	75	1 070	126	19	207	8
9	646	503 S	28 100	156	65 S	876	122	14 S	148	9
10	668	443 S	25 600	137	37 S	438	111	13 S	125	10
11	759	706 S	46 300	122	21	221	110	12 S	114	11
12	750	700 S	45 400	125	26 S	281	110	11	105	12
13	663	563 S	32 300	120	23 S	238	120	12 S	124	13
14	643	511 S	28 400	116	22 S	220	130	14 S	157	14
15	617	584 S	31 100	111	23	221	125	14	151	15
16	586	390 S	19 700	104	21 S	189	106	12	110	16
17	527	306 S	13 900	100	20	173	102	9 S	79.3	17
18	416	397 S	14 300	90.3	19	148	101	8	69.8	18
19	394	378 S	12 900	86.7 E	16 S	120	100	8 S	69.1	19
20	408	274 S	9 660	83.0 E	12	86.1	103	11 S	97.9	20
21	371	242 S	7 760	82.1 E	10 S	70.9	112	14	135	21
22	331	175 S	5 000	90.9 E	12	94.2	128	17 S	188	22
23	303	151 S	3 950	106 E	18 S	165	136	20	235	23
24	265	116 S	2 660	111 E	23 S	221	134	21	243	24
25	241	99	2 060	90.9 E	20	157	134	20 S	232	25
26	211	94 S	1 710	93.2 E	14 S	113	142	19	233	26
27	174	89 S	1 340	120 A	16 S	166	143	18 S	222	27
28	148	54	691	134	20 S	232	142	18 S	221	28
29	131	52 S	589	128	20	221	144	18	224	29
30	125	57	616	113	18 S	176	153	17 S	225	30
31	120	70 S	726	109	16 S	151				31
TOTAL	14 486		614 062	3 865.1		15 934.2	3 621		5 218.1	TOTAL

A - MANUAL GAUGE E - ESTIMATED S - SAMPLE(S) COLLECTED THIS DAY

SOUTH SASKATCHEWAN RIVER AT HIGHWAY NO. 41 - STATION NO. 05AK001

SUSPENDED SEDIMENT FOR 1975

DAY	OCT DAILY DISCHARGE (M3/S)	OCT MEAN CONCENTRATION (MG/L)	OCT DAILY LOAD (TNE)	NOV DAILY DISCHARGE (M3/S)	NOV MEAN CONCENTRATION (MG/L)	NOV DAILY LOAD (TNE)	DEC DAILY DISCHARGE (M3/S)	DEC MEAN CONCENTRATION (MG/L)	DEC DAILY LOAD (TNE)	DAY
1	159	16	220	134	22 S	255	38.2 B	27	89.1	1
2	153	18 S	238	128	18 S	199	61.4 B	36 S	191	2
3	143	19	235	123	15	159	91.2 B	62 S	489	3
4	143	19 S	235	113	13 S	127	78.7 B	66 S	449	4
5	140	17 S	206	99.1	11	94.2	53.5 B	11 S	50.8	5
6	124	15	161	91.2	9 S	70.9	38.2 B	6	19.8	6
7	118	13 S	133	90.3	9 S	70.2	30.6 B	6	15.9	7
8	112	12	116	89.5	9	69.6	36.5 B	7	22.1	8
9	103	11	97.9	97.4	9 S	75.7	50.4 B	9	39.2	9
10	90.9	12 S	94.2	108	9	84.0	78.7 B	12	81.6	10
11	85.8	12	89.0	101	11 S	96.0	106 B	16	147	11
12	85.8	12 S	89.0	99.7	12	103	137 B	19 S	225	12
13	93.7	11	89.1	102	15 S	132	148 B	23	294	13
14	96.6	9 S	75.1	109	20	188	138 B	24	286	14
15	99.1	10	85.6	96.8	25	209	126 B	19	207	15
16	99.7	13 S	112	89.8	31 S	241	119 B	11	113	16
17	106	17	156	97.4	31	261	118 B	12 S	122	17
18	112	17 S	165	114	27	266	98.5 B	17 S	145	18
19	119	17 S	175	117	20 S	202	102 B	20	176	19
20	114	19	187	108	15	140	101 B	17	148	20
21	129	17 S	189	90.0	19 S	148	107 B	16	148	21
22	150	17	220	94.0	28	227	108 B	15	140	22
23	131	17 S	192	70.8 B	30	184	113 B	16	156	23
24	130	17	191	62.3 B	30	161	113 B	17	166	24
25	119	15 S	154	55.5 B	30 S	144	121 B	19	199	25
26	126	15 S	163	45.9 B	30	119	129 B	20 S	223	26
27	135	18	210	32.6 B	29	81.7	130 B	19	213	27
28	135	17 S	198	31.4 B	29 S	78.7	130 B	18	202	28
29	135	15	175	30.9 B	26	69.4	123 B	16	170	29
30	135	17 S	198	34.0 B	28	82.3	118 B	14	143	30
31	135	21	245				120 B	14	145	31
TOTAL	3 757.6		5 093.9	2 655.6		4 337.7	3 062.9		5 215.5	TOTAL

B - ICE CONDITIONS

S - SAMPLE(S) COLLECTED THIS DAY

SOUTH SASKATCHEWAN RIVER AT HIGHWAY NO. 41 - STATION NO. 05AK001

SUSPENDED SEDIMENT FOR 1976

LOCATION: LAT 50 44 15 N LONG 110 05 45 W
DRAINAGE AREA: 66 000 KM2
TYPE OF FLOW: REGULATED
TYPE OF GAUGE: MANUAL

TOTAL SUSPENDED SEDIMENT LOAD 1 300 000 TONNES FOR THE PERIOD JAN 01 TO DEC 31

REMARKS:

DAY	JAN DAILY DISCHARGE (M3/S)	JAN MEAN CONCENTRATION (MG/L)	JAN DAILY LOAD (TNE)	FEB DAILY DISCHARGE (M3/S)	FEB MEAN CONCENTRATION (MG/L)	FEB DAILY LOAD (TNE)	MAR DAILY DISCHARGE (M3/S)	MAR MEAN CONCENTRATION (MG/L)	MAR DAILY LOAD (TNE)	DAY
1	108 B	13	121	134 B	35	405	114 B	20	197	1
2	96.8 B	12	100	136 B	30	353	114 B	18	177	2
3	91.5 B	11	87.0	138 B	28	334	113 B	17	166	3
4	87.2 B	9	67.8	139 B	29	348	108 B	16 S	149	4
5	81.6 B	8	56.4	140 B	29 S	351	98.5 B	14	119	5
6	76.5 B	7 S	46.3	140 B	29	351	88.3 B	13	99.2	6
7	71.9 B	7 S	43.5	136 B	30	353	82.4 B	11	78.3	7
8	69.7 B	10	60.2	127 B	28	307	83.0 B	9	64.5	8
9	68.0 B	14	82.3	121 B	26	272	90.3 B	8	62.4	9
10	66.0 B	13	74.1	117 B	24	243	97.7 B	7 S	59.1	10
11	65.4 B	7	39.6	116 B	21	210	101 B	12	105	11
12	68.0 B	6	35.3	116 B	20 S	200	102 B	19	167	12
13	86.4 B	7	52.3	114 B	20	197	100 B	26	225	13
14	101 B	12 S	105	113 B	21	205	97.7 B	35	295	14
15	117 B	22	222	115 B	21	209	95.7 B	45	372	15
16	128 B	24	265	117 B	22	222	94.9 B	55 S	451	16
17	133 B	25	287	119 B	22	226	111 B	61	585	17
18	138 B	25	298	120 B	23	238	118 B	68	693	18
19	146 B	26	328	116 B	24 S	241	123 B	79 S	840	19
20	153 B	27	357	111 B	29	278	132 B	88	1 000	20
21	161 B	31 S	431	106 B	34	311	160 B	97	1 340	21
22	170 B	38	558	107 B	40	370	198 B	105	1 800	22
23	181 B	45	704	109 B	44	414	211 B	114	2 080	23
24	192 B	53	879	112 B	45 S	435	213 B	121 S	2 230	24
25	168 B	61	885	122 B	36	379	206 B	106	1 890	25
26	153 B	69	912	122 B	25 S	264	201 B	132	2 290	26
27	145 B	77	965	120 B	23	238	195 B	156	2 630	27
28	139 B	81 S	973	116 B	22	220	212 B	87 S	1 590	28
29	136 B	67	787	114 B	21	207	179 B	65	1 010	29
30	134 B	50	579				171 B	67	990	30
31	134 B	40	463				166 B	102	1 400	31
TOTAL	3 666.0		10 863.8	3 513		8 381	4 176.5		25 214.5	TOTAL

B - ICE CONDITIONS

S - SAMPLE(S) COLLECTED THIS DAY

WATER SURVEY OF CANADA
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CALGARY, ALTA.

SOUTH SASKATCHEWAN RIVER AT HIGHWAY NO. 41 - STATION NO. 05AK001

SUSPENDED SEDIMENT FOR 1976

DAY	APR DAILY DISCHARGE (M3/S)	APR MEAN CONCENTRATION (MG/L)	APR DAILY LOAD (TNE)	MAY DAILY DISCHARGE (M3/S)	MAY MEAN CONCENTRATION (MG/L)	MAY DAILY LOAD (TNE)	JUN DAILY DISCHARGE (M3/S)	JUN MEAN CONCENTRATION (MG/L)	JUN DAILY LOAD (TNE)	DAY
1	154 E	157 S	2 090	137	61 S	722	368	234 S	7 440	1
2	152 E	183	2 400	135	43 S	502	396	241 S	8 250	2
3	144 E	168	2 090	123	29	308	360	214 S	6 660	3
4	136 E	150 S	1 760	129	39 S	435	280	183 S	4 430	4
5	131 E	132	1 490	127	36	395	282	126 S	3 070	5
6	132 E	123	1 400	122	29 S	306	272	128 S	3 010	6
7	129 E	108 S	1 200	146	33	416	236	110 S	2 240	7
8	123 E	100 S	1 060	189	61 S	996	217	95 S	1 780	8
9	126	86	936	240	120 S	2 490	196	76 S	1 290	9
10	153	117 S	1 550	282	221	5 380	190	74 S	1 210	10
11	152	103 S	1 350	345	366 S	10 900	186	70	1 120	11
12	157	106	1 440	413	599 S	21 400	180	68 S	1 060	12
13	167	108 S	1 560	430	652 S	24 200	170	61 S	896	13
14	166	100	1 430	453	822 S	32 200	166	57	818	14
15	167	97 S	1 400	541	1 310 S	61 200	176	67 S	1 020	15
16	174	104	1 560	549	1 130 S	53 600	216	99	1 850	16
17	189	112	1 830	614	966 S	51 200	222	97 S	1 860	17
18	201	114 S	1 980	589	870 S	44 300	253	128	2 800	18
19	195	115	1 940	541	722 S	33 700	247	135 S	2 880	19
20	195	122 S	2 060	498	618 S	26 600	240	109 S	2 260	20
21	203	123	2 160	467	544 S	21 900	242	153	3 200	21
22	198	116 S	1 980	419	539 S	19 500	239	151 S	3 120	22
23	191	98	1 620	394	774 S	26 300	247	132	2 820	23
24	173	66 S	987	399	482 S	16 600	259	120 S	2 690	24
25	141	49 S	597	394	688 S	23 400	283	123	3 010	25
26	119	45	463	368	376 S	12 000	297	160 S	4 110	26
27	133	55 S	632	365	310 S	9 780	311	190	5 110	27
28	131	50 S	566	357	302 S	9 320	337	204 S	5 940	28
29	131	115 S	1 300	413	250 S	8 920	348	238 S	7 160	29
30	134	81	938	402	283 S	9 830	345	294 S	8 760	30
31				382	443 S	14 600				31
TOTAL	4 697		43 769	10 963		543 400	7 761		101 864	TOTAL

E - ESTIMATED S - SAMPLE(S) COLLECTED THIS DAY

WATER SURVEY OF CANADA
SEP 03 1987 PAGE 42
CALGARY, ALTA.

SOUTH SASKATCHEWAN RIVER AT HIGHWAY NO. 41 - STATION NO. 05AK001

SUSPENDED SEDIMENT FOR 1976

DAY	JUL DAILY DISCHARGE (M3/S)	JUL MEAN CONCENTRATION (MG/L)	JUL DAILY LOAD (TNE)	AUG DAILY DISCHARGE (M3/S)	AUG MEAN CONCENTRATION (MG/L)	AUG DAILY LOAD (TNE)	SEP DAILY DISCHARGE (M3/S)	SEP MEAN CONCENTRATION (MG/L)	SEP DAILY LOAD (TNE)	DAY
1	320	205 S	5 670	184	46 S	731	212	50 S	916	1
2	264	220 S	5 020	191	36	594	193	51 S	850	2
3	232	147	2 950	189	53 S	865	209	47	849	3
4	210	76 S	1 380	205	84	1 490	204	43 S	758	4
5	215	85	1 580	201	78 S	1 350	199	40 S	688	5
6	247	128 S	2 730	205	74	1 310	182	36	566	6
7	243	140	2 940	193	60 S	1 000	166	32 S	459	7
8	238	138 S	2 840	185	224 S	3 580	138	25	298	8
9	224	86 S	1 660	532	1 030	47 300	123	20 S	213	9
10	213	88	1 620	640	1 280 S	70 800	125	18	194	10
11	211	89 S	1 620	600	1 090 S	56 500	118	12 S	122	11
12	201	127	2 210	680	968 S	56 900	156	19 S	256	12
13	204	206 S	3 630	634	802 S	43 900	217	39	731	13
14	242	236 S	4 930	592	635 S	32 500	240	55 S	1 140	14
15	270	335	7 810	530	448 S	20 500	205	44	779	15
16	279	285 S	6 870	490	374 S	15 800	158	24 S	328	16
17	282	190	4 630	447	349 S	13 500	176	22	335	17
18	264	114 S	2 600	394	1 140 S	38 800	150	21 S	272	18
19	252	124	2 700	351	787 S	23 900	157	16 S	217	19
20	220	92 S	1 750	348	234 S	7 040	175	22	333	20
21	207	80	1 430	334	246 S	7 100	158	13 S	177	21
22	197	51 S	868	320	211 S	5 830	156	11	148	22
23	214	51	943	323	196 S	5 470	135	6 S	70.0	23
24	214	47 S	869	303	191	5 000	114	3	29.5	24
25	215	49 S	910	289	109 S	2 720	114	2 S	19.7	25
26	195	41	691	274	109	2 580	151	9 S	117	26
27	205	44 S	779	239	81	1 670	154	14	186	27
28	208	52 S	935	218	64 S	1 210	120	6 S	62.2	28
29	177	44 S	673	208	88 S	1 580	112	5 S	48.4	29
30	159	43	591	181	80	1 250	99.4	6 S	51.5	30
31	150	33	428	167	35 S	505				31
TOTAL	6 972		76 257	10 647		473 275	4 816.4		11 213.3	TOTAL

S - SAMPLE(S) COLLECTED THIS DAY

SOUTH SASKATCHEWAN RIVER AT HIGHWAY NO. 41 - STATION NO. 05AK001

SUSPENDED SEDIMENT FOR 1976

DAY	OCT DAILY DISCHARGE (M3/S)	OCT MEAN CONCENTRATION (MG/L)	OCT DAILY LOAD (TNE)	NOV DAILY DISCHARGE (M3/S)	NOV MEAN CONCENTRATION (MG/L)	NOV DAILY LOAD (TNE)	DEC DAILY DISCHARGE (M3/S)	DEC MEAN CONCENTRATION (MG/L)	DEC DAILY LOAD (TNE)	DAY
1	93.2	5	40.3	116	13	130	33.7 B	6	17.5	1
2	106	6 S	55.0	112	11 S	106	33.1 B	6	17.2	2
3	114	5 S	49.2	107	9	83.2	43.0 B	6	22.3	3
4	121	7	73.2	98.0	8 S	67.7	58.0 B	7	35.1	4
5	131	9 S	102	87.2	8	60.3	79.3 B	7	48.0	5
6	135	8	93.3	80.1	8	55.4	60.9 B	7	36.8	6
7	129	6 S	66.9	76.2	8 S	52.7	53.5 B	7	32.4	7
8	104	5	44.9	88.3	8	61.0	47.6 B	7	28.8	8
9	91.2	4 S	31.5	91.2	8 S	63.0	42.8 B	6	22.2	9
10	89.2	3 S	23.1	108	8	74.6	39.6 B	6	20.5	10
11	88.3	5	38.1	122	8	84.3	36.2 B	6	18.8	11
12	85.8	6 S	44.5	106	8	73.3	36.0 B	6	18.7	12
13	85.5	11	81.3	82.4	8	57.0	38.2 B	6	19.8	13
14	83.5	20 S	144	64.3	7	38.9	41.1 B	6 S	21.3	14
15	82.4	13	92.6	65.4 B	7	39.6	46.7 B	6	24.2	15
16	80.4	9 S	62.5	62.0 B	7	37.5	54.1 B	6	28.0	16
17	80.1	11 S	76.1	85.0 B	8	58.8	61.2 B	6	31.7	17
18	77.6	7	46.9	65.1 B	7	39.4	73.6 B	7	44.5	18
19	67.4	5 S	29.1	67.1 B	7	40.6	87.2 B	7	52.7	19
20	60.6	4	20.9	70.8 B	7	42.8	108 B	7	65.3	20
21	65.4	5	28.3	53.0 B	7	32.1	101 B	7	61.1	21
22	76.7	6 S	39.8	44.7 B	6	23.2	92.0 B	7	55.6	22
23	79.6	7	48.1	41.1 B	6	21.3	81.6 B	7	49.4	23
24	90.0	12 S	93.3	36.2 B	6	18.8	76.7 B	6	39.8	24
25	125	19	205	30.9 B	6	16.0	74.2 B	6	38.5	25
26	91.5	11 S	87.0	37.9 B	6	19.6	73.1 B	6	37.9	26
27	92.3	10 S	79.7	37.9 B	6	19.6	74.5 B	6	38.6	27
28	89.8	10 S	77.6	36.0 B	6	18.7	76.2 B	6	39.5	28
29	91.7	10	79.2	34.3 B	6	17.8	76.7 B	6	39.8	29
30	93.2	10 S	80.5	36.2 B	6	18.8	75.9 B	6	39.3	30
31	99.1	11 S	94.2				72.2 B	6	37.4	31
TOTAL	2 899.5		2 128.1	2 142.3		1 472.0	1 947.9		1 082.7	TOTAL

B - ICE CONDITIONS

S - SAMPLE(S) COLLECTED THIS DAY

WATER SURVEY OF CANADA
SEP 03 1987 PAGE 44
CALGARY, ALTA.

SOUTH SASKATCHEWAN RIVER AT HIGHWAY NO. 41 - STATION NO. 05AK001

SUSPENDED SEDIMENT FOR 1977

LOCATION: LAT 50 44 15 N LONG 110 05 45 W
DRAINAGE AREA: 66 000 KM2
TYPE OF FLOW: REGULATED
TYPE OF GAUGE: MANUAL

TOTAL SUSPENDED SEDIMENT LOAD 120 000 TONNES FOR THE PERIOD JAN 01 TO DEC 31

REMARKS:

DAY	JAN DAILY DISCHARGE (M3/S)	JAN MEAN CONCENTRATION (MG/L)	JAN DAILY LOAD (TNE)	FEB DAILY DISCHARGE (M3/S)	FEB MEAN CONCENTRATION (MG/L)	FEB DAILY LOAD (TNE)	MAR DAILY DISCHARGE (M3/S)	MAR MEAN CONCENTRATION (MG/L)	MAR DAILY LOAD (TNE)	DAY
1	66.0 B	5	28.5	79.6 B	15	103	96.3 B	16	133	1
2	59.5 B	5	25.7	73.9 B	15	95.8	94.6 B	16	131	2
3	51.8 B	5	22.4	79.3 B	15	103	93.4 B	16	129	3
4	48.1 B	5	20.8	85.5 B	15	111	92.0 B	18	143	4
5	45.3 B	5 S	19.6	85.8 B	15	111	92.0 B	17	135	5
6	47.9 B	6	24.8	85.5 B	14	103	94.9 B	17	139	6
7	51.3 B	6	26.6	92.0 B	14	111	101 B	16	140	7
8	54.4 B	7	32.9	95.7 B	14	116	110 B	15	143	8
9	54.9 B	7	33.2	95.7 B	14	116	118 B	15	153	9
10	50.4 B	8	34.8	96.0 B	14	116	114 B	17 S	167	10
11	44.5 B	8	30.8	101 B	13	113	110 B	17	162	11
12	45.0 B	9	35.0	102 B	13	115	105 B	16	145	12
13	50.4 B	9	39.2	102 B	13	115	99.1 B	16	137	13
14	61.2 B	10	52.9	95.7 B	13	107	98.5 B	16	136	14
15	60.0 B	10	51.8	92.0 B	13 S	103	93.7 B	16	130	15
16	56.6 B	11	53.8	90.3 B	13	101	90.9 B	16	126	16
17	55.2 B	11	52.5	90.3 B	13	101	91.2 B	17	134	17
18	56.1 B	12	58.2	92.6 B	13	104	91.7 B	20	158	18
19	85.0 B	12	88.1	93.7 B	14	113	90.3 B	24	187	19
20	100 B	13	112	99.1 B	14	120	85.0 B	28	206	20
21	99.1 B	13	111	104 B	14	126	81.8 B	21	148	21
22	101 B	14	122	105 B	17	154	78.7 B	23	156	22
23	101 B	14	122	97.7 B	16	135	79.0 B	21	143	23
24	101 B	15	131	90.9 B	15	118	78.4 B	23	156	24
25	104 B	15	135	107 B	17	157	79.0 B	18	123	25
26	103 B	16 S	142	100 B	17	147	75.9 B	13	85.3	26
27	100 B	16	138	98.8 B	16	137	77.0 B	11	73.2	27
28	96.6 B	16	134	98.5 B	15	128	71.9 B	12	74.5	28
29	93.2 B	16	129				75.3 B	20 S	130	29
30	89.8 B	16	124				73.6 B	30	191	30
31	85.0 B	16	118				66.5 B	31 S	178	31
TOTAL	2 217.3		2 249.6	2 629.6		3 279.8	2 798.7		4 392.0	TOTAL

B - ICE CONDITIONS

S - SAMPLE(S) COLLECTED THIS DAY

SOUTH SASKATCHEWAN RIVER AT HIGHWAY NO. 41 - STATION NO. 05AK001

SUSPENDED SEDIMENT FOR 1977

DAY	APR DAILY DISCHARGE (M3/S)	APR MEAN CONCENTRATION (MG/L)	APR DAILY LOAD (TNE)	MAY DAILY DISCHARGE (M3/S)	MAY MEAN CONCENTRATION (MG/L)	MAY DAILY LOAD (TNE)	JUN DAILY DISCHARGE (M3/S)	JUN MEAN CONCENTRATION (MG/L)	JUN DAILY LOAD (TNE)	DAY
1	59.5 B	25	129	17.3	3	4.48	95.4	101	832	1
2	60.6 B	21	110	17.2	3	4.46	108	75 S	700	2
3	75.3 B	23	150	16.1	3 S	4.17	116 A	75	752	3
4	71.9 B	22 S	137	26.1	5	11.3	126 E	66 S	719	4
5	70.2 B	20	121	32.6	5 S	14.1	112 E	35 S	339	5
6	70.8 B	18 S	110	32.3	5	14.0	86.4 E	21	157	6
7	73.6	16	102	38.2	7 S	23.1	51.0 E	12	52.9	7
8	77.9	17 S	114	44.2	6 S	22.9	42.5 E	8 S	29.4	8
9	102	17	150	47.0	6	24.4	53.8 E	8	37.2	9
10	97.1	15	126	49.3	6 S	25.6	80.7 E	8 S	55.8	10
11	110	23 S	219	51.8	7	31.3	78.7 E	8	54.4	11
12	113	25	244	56.1	18 S	87.2	112 E	11 S	106	12
13	106	24 S	220	51.8	12	53.7	119 E	19	195	13
14	103	15	133	47.9	10 S	41.4	142	658 S	8 070	14
15	105	11 S	99.8	49.0	7 S	29.6	195	1 770	29 800	15
16	100	12	104	55.5	14	67.1	174	1 300 S	19 500	16
17	94.9	13 S	107	78.4	110 S	745	136	847	9 950	17
18	88.3	10	76.3	77.3	102	681	123	239 S	2 540	18
19	75.6	10 S	65.3	73.9	68 S	434	92.8	86 S	690	19
20	76.5	9	59.5	70.8	64	391	106	118	1 080	20
21	75.3	7 S	45.5	76.7	108 S	716	106	50 S	458	21
22	73.1	6	37.9	128	139 S	1 540	100	36	311	22
23	62.6	6 S	32.5	104 A	97	872	103	57 S	507	23
24	64.3	6 S	33.3	95.7 E	63 S	521	98.5	63	536	24
25	63.7	7	38.5	87.2 A	44 S	331	88.6	38 S	291	25
26	49.0	9	38.1	79.3	34 S	233	96.0	32 S	265	26
27	40.5	9 S	31.5	73.9	34	217	96.0	87	722	27
28	36.0	5 S	15.6	64.6	33 S	184	71.9	25 S	155	28
29	27.4	3 S	7.10	64.0	33	182	57.2	16	79.1	29
30	20.8	3 S	5.39	61.7	31 S	165	50.4	16 S	69.7	30
31				60.6	35	183				31
TOTAL	2 243.9		2 862.29	1 828.5		7 853.81	3 018.0		79 053.5	TOTAL

A - MANUAL GAUGE B - ICE CONDITIONS E - ESTIMATED S - SAMPLE(S) COLLECTED THIS DAY

SOUTH SASKATCHEWAN RIVER AT HIGHWAY NO. 41 - STATION NO. 05AK001

SUSPENDED SEDIMENT FOR 1977

DAY	JUL DAILY DISCHARGE (M3/S)	JUL MEAN CONCENTRATION (MG/L)	JUL DAILY LOAD (TNE)	AUG DAILY DISCHARGE (M3/S)	AUG MEAN CONCENTRATION (MG/L)	AUG DAILY LOAD (TNE)	SEP DAILY DISCHARGE (M3/S)	SEP MEAN CONCENTRATION (MG/L)	SEP DAILY LOAD (TNE)	DAY
1	55.8	15	72.3	41.9	10	36.2	127	34 S	373	1
2	61.2	15 S	79.3	45.3	16 S	62.6	98.0	22	186	2
3	57.5	12 S	59.6	43.9	21	79.7	92.6	18 S	144	3
4	52.7	10	45.5	44.7	28 S	108	81.3	15 S	105	4
5	52.7	8 S	36.4	55.2	37	176	77.3	21	140	5
6	66.0	14	79.8	48.1	22 S	91.4	74.2	27 S	173	6
7	61.7	13 S	69.3	44.5	12 S	46.1	61.4	20	106	7
8	52.7	10	45.5	53.0	22	101	64.0	16 S	88.5	8
9	47.0	8 S	32.5	50.7	18 S	78.8	70.2	18	109	9
10	46.2	7 S	27.9	49.3	15	63.9	56.6	11 S	53.8	10
11	47.6	9	37.0	53.5	22 S	102	50.4	7 S	30.5	11
12	46.7	10 S	40.3	56.6	58	284	48.4	7	29.3	12
13	44.7	12	46.3	57.5	75 S	373	50.7	7 S	30.7	13
14	45.3	13 S	50.9	58.9	36 S	183	54.1	9	42.1	14
15	44.2	11	42.0	63.7	42	231	52.4	8 S	36.2	15
16	43.9	9 S	34.1	58.3	35 S	176	54.4	7	32.9	16
17	42.5	8 S	29.4	57.2	26	128	63.1	8 S	43.6	17
18	40.2	7	24.3	58.0	17 S	85.2	62.9	10 S	54.3	18
19	39.6	7 S	24.0	58.6	15	75.9	48.7	9	37.9	19
20	57.8	22	110	139	76 S	913	48.7	12 S	50.5	20
21	54.7	16 S	75.6	155	85 S	1 140	57.8	29	145	21
22	51.8	11	49.2	117	56	566	73.6	102 S	649	22
23	49.3	9 S	38.3	107	37 S	342	63.1	58	316	23
24	47.0	9 S	36.5	103	33	294	85.8	38 S	282	24
25	42.2	9	32.8	87.5	28 S	212	77.0	27 S	180	25
26	40.2	8 S	27.8	101	26	227	63.1	19 S	104	26
27	43.9	14	53.1	108	25 S	233	58.3	58 S	292	27
28	45.9	17 S	67.4	86.1	16	119	77.0	39	259	28
29	42.5	13	47.7	98.5	22 S	187	69.4	17 S	102	29
30	42.5	10 S	36.7	101	25 S	218	62.9	13	70.6	30
31	43.3	10 S	37.4	110	27	257				31
TOTAL	1 509.3		1 488.9	2 312.0		7 189.8	2 024.4		4 265.9	TOTAL

S - SAMPLE(S) COLLECTED THIS DAY

SOUTH SASKATCHEWAN RIVER AT HIGHWAY NO. 41 - STATION NO. 05AK001

SUSPENDED SEDIMENT FOR 1977

DAY	OCT DAILY DISCHARGE (M3/S)	OCT MEAN CONCENTRATION (MG/L)	OCT DAILY LOAD (TNE)	NOV DAILY DISCHARGE (M3/S)	NOV MEAN CONCENTRATION (MG/L)	NOV DAILY LOAD (TNE)	DEC DAILY DISCHARGE (M3/S)	DEC MEAN CONCENTRATION (MG/L)	DEC DAILY LOAD (TNE)	DAY
1	86.9	37 S	278	54.4	15 S	70.5	45.3 B	6	23.5	1
2	92.3	47 S	375	58.0	17	85.2	45.6 B	7	27.6	2
3	80.4	33	229	64.3	25 S	139	45.9 B	5	19.8	3
4	61.4	13 S	69.0	61.7	24	128	47.3 B	4	16.3	4
5	64.3	19	106	56.4	21 S	102	48.1 B	8	33.2	5
6	57.5	18 S	89.4	59.5	18 S	92.5	48.7 B	14	58.9	6
7	60.9	13	68.4	56.6 B	18	88.0	48.1 B	19	79.0	7
8	64.6	15 S	83.7	60.0 B	26 S	135	48.1 B	18	74.8	8
9	65.4	16 S	90.4	56.9 B	21	103	48.1 B	16	66.5	9
10	76.5	26	172	53.0 B	17 S	77.8	48.7 B	15	63.1	10
11	68.0	16 S	94.0	47.9 B	17	70.4	50.4 B	12	52.3	11
12	54.7	11	52.0	45.6 B	16 S	63.0	49.8 B	9	38.7	12
13	52.1	14 S	63.0	47.6 B	15 S	61.7	49.0 B	8	33.9	13
14	61.4	17	90.2	49.6 B	14	60.0	48.1 B	6 S	33.2	14
15	53.0	9 S	41.2	54.4 B	31 S	146	45.3 B	8	31.3	15
16	48.4	12 S	50.2	58.9 B	37	188	45.0 B	8	31.1	16
17	55.8	13	62.7	56.6 B	31	152	45.9 B	8	31.7	17
18	47.3	9 S	36.8	56.6 B	25	122	47.9 B	8	33.1	18
19	43.3	8	29.9	48.4 B	17	71.1	50.7 B	8	35.0	19
20	41.3	6 S	21.4	41.9 B	15	54.3	54.7 B	8	37.8	20
21	46.2	11	43.9	38.5 B	9	29.9	59.2 B	8	40.9	21
22	93.2	34 S	274	42.5 B	16	58.8	62.3 B	8	43.1	22
23	70.2	19 S	115	40.8 B	15	52.9	61.7 B	8	42.6	23
24	59.7	29	150	37.7 B	13	42.3	59.2 B	8	40.9	24
25	65.7	30 S	170	35.4 B	9	27.5	56.9 B	8	39.3	25
26	60.3	23	120	33.4 B	3	8.66	56.4 B	8	39.0	26
27	57.5	18 S	89.4	39.6 B	8	27.4	58.3 B	8	40.3	27
28	56.9	17	83.6	46.2 B	10	39.9	60.3 B	8	41.7	28
29	56.4	17	82.8	48.1 B	6	24.9	60.0 B	8	41.5	29
30	54.9	17 S	80.6	45.6 B	4	15.8	59.7 B	8	41.3	30
31	53.5	16	74.0				59.7 B	8	41.3	31
TOTAL	1 910.0		3 385.6	1 496.1		2 337.56	1 614.4		1 272.7	TOTAL

B - ICE CONDITIONS

S - SAMPLE(S) COLLECTED THIS DAY

SOUTH SASKATCHEWAN RIVER AT HIGHWAY NO. 41 - STATION NO. 05AK001

SUSPENDED SEDIMENT FOR 1978

LOCATION: LAT 50 44 15 N LONG 110 05 45 W
DRAINAGE AREA: 66 000 KM2
TYPE OF FLOW: REGULATED
TYPE OF GAUGE: MANUAL

TOTAL SUSPENDED SEDIMENT LOAD 2 450 000 TONNES FOR THE PERIOD JAN 01 TO DEC 31

REMARKS:

DAY	JAN DAILY DISCHARGE (M3/S)	JAN MEAN CONCENTRATION (MG/L)	JAN DAILY LOAD (TNE)	FEB DAILY DISCHARGE (M3/S)	FEB MEAN CONCENTRATION (MG/L)	FEB DAILY LOAD (TNE)	MAR DAILY DISCHARGE (M3/S)	MAR MEAN CONCENTRATION (MG/L)	MAR DAILY LOAD (TNE)	DAY
1	56.9 B	8	39.3	44.5 B	25	96.1	90.0 B	25	194	1
2	55.8 B	8	38.6	45.9 B	25	99.1	93.4 B	25	202	2
3	54.4 B	8	37.6	48.1 B	25	104	90.9 B	25	196	3
4	53.5 B	8	37.0	48.7 B	25	105	87.8 B	25	190	4
5	51.8 B	8	35.8	48.4 B	25	105	85.0 B	25	184	5
6	50.4 B	10	43.5	48.4 B	30	125	82.1 B	22	156	6
7	49.0 B	10	42.3	50.1 B	30	130	79.3 B	22	151	7
8	47.9 B	10	41.4	51.3 B	30	133	76.7 B	22 S	146	8
9	46.2 B	10	39.9	53.2 B	30	138	75.0 B	22	143	9
10	45.3 B	10	39.1	55.2 B	30	143	78.7 B	22	150	10
11	45.3 B	10	39.1	42.8 B	35	129	85.2 B	25	184	11
12	45.6 B	10	39.4	44.7 B	35	135	92.3 B	25	199	12
13	45.0 B	10	38.9	47.6 B	35	144	99.4 B	25	215	13
14	43.6 B	10	37.7	65.4 B	35 S	198	105 B	25	227	14
15	42.8 B	10	37.0	71.6 B	35	217	113 B	25	244	15
16	43.0 B	15	55.7	79.9 B	35	242	130 B	35	393	16
17	43.0 B	15	55.7	84.1 B	35	254	125 B	35	378	17
18	42.5 B	15	55.1	81.6 B	35	247	117 B	35	354	18
19	42.5 B	15	55.1	79.9 B	35	242	113 B	35	342	19
20	43.3 B	15	56.1	79.3 B	35	240	137 B	35	414	20
21	43.0 B	15	55.7	81.6 B	30	212	167 B	50	721	21
22	42.2 B	15	54.7	83.5 B	30	216	200 B	80	1 380	22
23	41.9 B	15	54.3	85.2 B	30	221	232 B	100	2 000	23
24	41.9 B	15 S	54.3	81.8 B	30	212	263 B	150	3 410	24
25	45.0 B	15	58.3	81.3 B	30	211	309 B	200	5 340	25
26	48.4 B	20	83.6	83.0 B	25	179	279 B	375	9 040	26
27	50.7 B	20	87.6	84.7 B	25	183	309 B	750	20 000	27
28	50.7 B	20	87.6	86.9 B	25	188	354 B	2 560 E	78 300	28
29	48.4 B	20	83.6				283 B	2 030 E	49 600	29
30	45.9 B	20	79.3				227 B	1 130 E	22 200	30
31	44.5 B	20	76.9				278	380	9 130	31
TOTAL	1 450.4		1 640.2	1 838.7		4 848.2	4 856.8		205 783	TOTAL

B - ICE CONDITIONS E - ESTIMATED S - SAMPLE(S) COLLECTED THIS DAY

SOUTH SASKATCHEWAN RIVER AT HIGHWAY NO. 41 - STATION NO. 05AK001

SUSPENDED SEDIMENT FOR 1978

DAY	APR DAILY DISCHARGE (M3/S)	APR MEAN CONCENTRATION (MG/L)	APR DAILY LOAD (TNE)	MAY DAILY DISCHARGE (M3/S)	MAY MEAN CONCENTRATION (MG/L)	MAY DAILY LOAD (TNE)	JUN DAILY DISCHARGE (M3/S)	JUN MEAN CONCENTRATION (MG/L)	JUN DAILY LOAD (TNE)	DAY
1	292	610	15 400	140	126	1 520	450	524 S	20 400	1
2	303	840	22 000	150	100 S	1 300	433	975 S	36 500	2
3	391	1 670	56 400	202	118	2 060	436	1 970 S	74 200	3
4	286	990 S	24 500	247	366 S	7 810	569	705 S	34 700	4
5	262	700	15 800	250	354	7 650	530	484 S	22 200	5
6	222	448 S	8 590	253	280 S	6 120	521	556 S	25 000	6
7	194	310	5 200	271	288 S	6 740	580	1 030 S	51 600	7
8	188	244 S	3 960	266	283	6 500	651	1 010 S	56 800	8
9	178	232 S	3 570	263	265 S	6 020	756	1 180 S	77 100	9
10	162	229	3 210	260	256 S	5 750	799	1 430 S	98 700	10
11	160	242	3 350	248	246 S	5 270	793	1 210 S	82 900	11
12	160	230 S	3 180	234	234	4 730	816	1 090 S	76 800	12
13	150	171	2 220	230	214 S	4 250	816	1 030 S	72 600	13
14	139	137 S	1 650	263	240 S	5 450	770	934 S	62 100	14
15	157	144	1 950	281	298	7 230	731	784 S	49 500	15
16	137	136 S	1 610	273	293 S	6 910	691	758 S	45 300	16
17	127	122	1 340	265	274	6 270	646	602 S	33 600	17
18	105	116 S	1 050	289	255 S	6 370	572	497 S	24 600	18
19	136	142	1 670	351	489	14 800	547	523 S	24 700	19
20	136	126 S	1 480	360	500 S	15 600	501	505 S	21 900	20
21	126	108	1 180	439	989 S	37 500	476	451 S	18 500	21
22	126	91 S	991	453	978 S	38 300	447	361 S	13 900	22
23	135	218 S	2 540	436	1 470 S	55 400	428	274 S	10 100	23
24	131	214	2 420	470	1 120 S	45 500	382	212 S	7 000	24
25	135	131 S	1 530	532	1 120 S	51 500	379	211 S	6 910	25
26	144	128	1 590	564	1 310 S	63 800	422	222 S	8 090	26
27	148	195 S	2 490	575	1 230 S	61 100	425	200 S	7 340	27
28	140	156	1 890	595	1 140 S	58 600	439	174	6 600	28
29	135	115 S	1 340	561	1 080 S	52 300	436	162 S	6 100	29
30	144	140 S	1 740	521	840 S	37 800	425	171	6 280	30
31				487	549 S	23 100				31
TOTAL	5 249		195 841	10 729		653 250	16 867		1 082 020	TOTAL

S - SAMPLE(S) COLLECTED THIS DAY

SOUTH SASKATCHEWAN RIVER AT HIGHWAY NO. 41 - STATION NO. 05AK001

SUSPENDED SEDIMENT FOR 1978

DAY	JUL DAILY DISCHARGE (M3/S)	JUL MEAN CONCENTRATION (MG/L)	JUL DAILY LOAD (TNE)	AUG DAILY DISCHARGE (M3/S)	AUG MEAN CONCENTRATION (MG/L)	AUG DAILY LOAD (TNE)	SEP DAILY DISCHARGE (M3/S)	SEP MEAN CONCENTRATION (MG/L)	SEP DAILY LOAD (TNE)	DAY
1	377	179 S	5 830	202	51 S	890	159	68	934	1
2	368	207 S	6 580	202	46	803	162	54 S	756	2
3	357	156 S	4 810	199	36 S	619	182	59 S	928	3
4	360	182 S	5 660	191	31	512	200	75	1 300	4
5	385	226 S	7 520	174	28	421	200	64 S	1 110	5
6	388	316 S	10 600	169	24 S	350	198	75	1 280	6
7	371	423 S	13 600	155	21	281	188	82 S	1 330	7
8	362	213 S	6 660	144	18 S	224	188	83	1 350	8
9	362	159 S	4 970	150	33	428	190	80 S	1 310	9
10	354	177	5 410	139	30	360	195	71 S	1 200	10
11	351	184 S	5 580	127	24	263	211	437	7 970	11
12	371	258 S	8 270	111	16 S	153	249	778 S	16 700	12
13	362	315 S	9 850	96.6	9 S	75.1	251	651	14 100	13
14	311	269 S	7 230	90.0	13	101	252	531 S	11 600	14
15	282	145 S	3 530	89.8	12 S	93.1	271	426	9 970	15
16	276	105 S	2 500	96.3	13	108	279	188 S	4 530	16
17	255	102	2 250	102	12 S	106	283	217 S	5 310	17
18	214	80 S	1 480	98.0	14	119	283	283	6 800	18
19	218	58	1 090	92.6	12 S	96.0	258	174 S	3 880	19
20	223	63 S	1 210	131	16 S	181	249	116	2 500	20
21	208	37	665	180	62	964	242	97 S	2 030	21
22	271	103 S	2 410	201	40 S	695	204	57	1 000	22
23	300	135 S	3 500	184	62	986	221	73 S	1 390	23
24	331	366 S	10 500	181	84 S	1 310	228	60 S	1 180	24
25	314	178 S	4 830	184	72	1 140	230	53	1 050	25
26	264	113 S	2 580	260	305 S	6 850	219	47 S	889	26
27	235	75 S	1 520	242	177 S	3 700	215	42	780	27
28	229	71 S	1 400	191	108	1 780	221	42 S	802	28
29	218	66	1 240	201	233 S	4 050	195	22	371	29
30	221	58 S	1 110	191	129	2 130	191	46 S	759	30
31	229	64	1 270	167	85 S	1 230				31
TOTAL	9 367		145 655	4 941.3		31 018.2	6 609		105 109	TOTAL

S - SAMPLE(S) COLLECTED THIS DAY

WATER SURVEY OF CANADA
SEP 03 1987 PAGE 51
CALGARY, ALTA.

SOUTH SASKATCHEWAN RIVER AT HIGHWAY NO. 41 - STATION NO. 05AK001

SUSPENDED SEDIMENT FOR 1978

DAY	OCT DAILY DISCHARGE (M3/S)	OCT MEAN CONCENTRATION (MG/L)	OCT DAILY LOAD (TNE)	NOV DAILY DISCHARGE (M3/S)	NOV MEAN CONCENTRATION (MG/L)	NOV DAILY LOAD (TNE)	DEC DAILY DISCHARGE (M3/S)	DEC MEAN CONCENTRATION (MG/L)	DEC DAILY LOAD (TNE)	DAY
1	215	60 S	1 110	156 E	22	297	139 B	20	240	1
2	201	36	625	151 A	22 S	287	151 B	22	287	2
3	196 A	36 S	610	143	21	259	153 B	22	291	3
4	195	36	607	124	18	193	150 B	22	285	4
5	215	59 S	1 100	115	17	169	142 B	21	258	5
6	261	59	1 330	111	16	153	126 B	18	196	6
7	252 E	41 S	893	108	16	149	113 B	16	156	7
8	225 E	32 S	622	111	16	153	101 B	15	131	8
9	193 E	28	467	109	16	151	90.0 B	13	101	9
10	171 E	32 S	473	110	16	152	87.2 B	13	97.9	10
11	178 E	49	754	99.1 B	14	120	92.9 B	13	104	11
12	171 E	37 S	547	83.5 B	12	86.6	96.3 B	14	116	12
13	166 E	28	402	70.8 B	10	61.2	93.7 B	14	113	13
14	160 E	19 S	263	58.0 B	8	40.1	95.1 B	14	115	14
15	156 E	21 S	283	48.7 B	7	29.5	98.5 B	14	119	15
16	156 E	19	256	42.5 B	6	22.0	96.8 B	14	117	16
17	159 E	17 S	234	39.9 B	6	20.7	94.3 B	14	114	17
18	160 E	17	235	38.8 B	6	20.1	93.2 B	14	113	18
19	150 E	20 S	264	45.3 B	7	27.4	99.1 B	14	120	19
20	142 E	29	356	63.7 B	9	49.5	105 B	15	136	20
21	157 E	16 S	217	96.3 B	14	116	99.4 B	14	120	21
22	150 E	14 S	181	88.1 B	13	99.0	94.9 B	14	115	22
23	150 E	74	959	84.4 B	12	87.5	90.6 B	13	102	23
24	156 E	109 S	1 470	83.5 B	12	86.6	86.1 B	13	96.7	24
25	164 E	80	1 130	88.3 B	13	99.2	82.7 B	12	85.7	25
26	190 E	53 S	870	94.9 B	14	115	79.9 B	12	82.8	26
27	149 E	39	502	102 B	15	132	76.5 B	11	72.7	27
28	140 E	32 S	387	109 B	16	151	73.3 B	11	69.7	28
29	144 E	28 S	348	119 B	17	175	70.8 B	10	61.2	29
30	127 E	25	274	126 B	18	196	68.0 B	10	58.8	30
31	142 E	23 S	282				65.4 B	9	50.9	31
TOTAL	5 394		18 051	2 819.8		3 697.4	3 104.7		4 125.4	TOTAL

A - MANUAL GAUGE B - ICE CONDITIONS E - ESTIMATED S - SAMPLE(S) COLLECTED THIS DAY

SOUTH SASKATCHEWAN RIVER AT HIGHWAY NO. 41 - STATION NO. 05AK001

SUSPENDED SEDIMENT FOR 1979

LOCATION: LAT 50 44 15 N LONG 110 05 45 W
DRAINAGE AREA: 66 000 KM2
TYPE OF FLOW: REGULATED
TYPE OF GAUGE: MANUAL

TOTAL SUSPENDED SEDIMENT LOAD 1 160 000 TONNES FOR THE PERIOD APR 01 TO OCT 31

REMARKS:

DAY	APR DAILY DISCHARGE (M3/S)	APR MEAN CONCENTRATION (MG/L)	APR DAILY LOAD (TNE)	MAY DAILY DISCHARGE (M3/S)	MAY MEAN CONCENTRATION (MG/L)	MAY DAILY LOAD (TNE)	JUN DAILY DISCHARGE (M3/S)	JUN MEAN CONCENTRATION (MG/L)	JUN DAILY LOAD (TNE)	DAY
1	134 B	126	1 460	207	107 S	1 910	661	1 240 S	70 800	1
2	122 B	118	1 240	239	131	2 710	577	1 130 S	56 300	2
3	125 B	130	1 400	253	159 S	3 480	533	752 S	34 600	3
4	126 B	159	1 730	267	199	4 590	480	528 S	21 900	4
5	121 B	147	1 540	284	246 S	6 040	412	475 S	16 900	5
6	111 B	114	1 090	297	308 S	7 900	374	478 S	15 400	6
7	106 B	111	1 020	299	322	8 320	408	490 S	17 300	7
8	90.0 B	127	988	292	278 S	7 010	466	454 S	18 300	8
9	114 B	124	1 220	306	251	6 640	501	651 S	28 200	9
10	123 B	132	1 400	313	296 S	8 000	477	575 S	23 700	10
11	123 B	130	1 380	306	358	9 460	425	386 S	14 200	11
12	149 B	116	1 490	277	358 S	8 570	372	331 S	10 600	12
13	177 B	88	1 350	261	368 S	8 300	335	348 S	10 100	13
14	185 B	99	1 670	262	350	7 920	304	323 S	8 480	14
15	201 B	107	1 860	259	276 S	6 180	284	250	6 130	15
16	196 B	131	2 220	258	200	4 460	280	251 S	6 070	16
17	192	151	2 500	274	191 S	4 520	268	178 S	4 120	17
18	186	169	2 720	292	174	4 390	272	200	4 700	18
19	182	179 S	2 810	325	292 S	8 200	264	130 S	2 970	19
20	184	152	2 420	373	535 S	17 200	255	139	3 060	20
21	190	159 S	2 610	418	829 S	29 900	249	144 S	3 100	21
22	210	153 S	2 780	447	990 S	38 200	220	121	2 300	22
23	220	148	2 810	447	879 S	33 900	198	102 S	1 740	23
24	218	154 S	2 900	449	820 S	31 800	207	86 S	1 540	24
25	216	148	2 760	478	563 S	23 300	206	70	1 250	25
26	208	136 S	2 440	495	608 S	26 000	189 B	62 S	1 010	26
27	193	115	1 920	548	720 S	34 100	201 E	60	1 040	27
28	171	98 S	1 450	587	1 200 S	60 900	211 A	54 S	984	28
29	179	88 S	1 360	669 A	1 640 S	94 800	198 E	54	924	29
30	186	82	1 320	688	1 720 S	102 000	185 A	55 S	879	30
31				695	1 480 S	88 900				31
TOTAL	4 948.0		55 858	11 565		699 600	10 012		388 597	TOTAL

A - MANUAL GAUGE B - ICE CONDITIONS E - ESTIMATED S - SAMPLE(S) COLLECTED THIS DAY

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SOUTH SASKATCHEWAN RIVER AT HIGHWAY NO. 41 - STATION NO. 05AK001

SUSPENDED SEDIMENT FOR 1979

DAY	JUL DAILY DISCHARGE (M3/S)	JUL MEAN CONCENTRATION (MG/L)	JUL DAILY LOAD (TNE)	AUG DAILY DISCHARGE (M3/S)	AUG MEAN CONCENTRATION (MG/L)	AUG DAILY LOAD (TNE)	SEP DAILY DISCHARGE (M3/S)	SEP MEAN CONCENTRATION (MG/L)	SEP DAILY LOAD (TNE)	DAY
1	170 E	53 S	778	55.5	12	57.5	49.3	2 S	8.52	1
2	149 E	51	657	55.3	8 S	38.2	46.8	3 S	12.1	2
3	152 A	51 S	670	59.2	142	726	48.7	7	29.5	3
4	148 E	55	703	57.2	189 S	934	48.5	5 S	21.0	4
5	139 A	75 S	901	53.5	20	92.4	45.6	7	27.6	5
6	132	48	547	52.3	5	22.6	40.5	4 S	14.0	6
7	126	29 S	316	54.0	12 S	56.0	40.9	2	7.07	7
8	131	40	453	52.1	12	54.0	41.9	3 S	10.9	8
9	138	41	489	49.0	5	21.2	41.0	3 S	10.6	9
10	114	27 S	266	53.0	10	45.8	41.6	3	10.8	10
11	105	19	172	59.9	13 S	67.3	41.1	2 S	7.10	11
12	98.1	12 S	102	63.0	8 S	43.5	37.7	3	9.77	12
13	92.2	12	95.6	54.1	5	23.4	36.3	10 S	31.4	13
14	86.4	10 S	74.6	54.2	13 S	60.9	37.1	8	25.6	14
15	89.2	8 S	61.7	56.0	14	67.7	43.8	5 S	18.9	15
16	86.0	7	52.0	54.0	10 S	46.7	44.7	5 S	19.3	16
17	79.7	6 S	41.3	51.5	9	40.0	43.8	4	15.1	17
18	81.4	5	35.2	46.9	9 S	36.5	46.0	6 S	23.8	18
19	80.8	5 S	34.9	44.8	6 S	23.2	44.8	5	19.4	19
20	76.2	4	26.3	45.0	8	31.1	42.9	5 S	18.5	20
21	73.6	5 S	31.8	47.3	13 S	53.1	39.2	5	16.9	21
22	72.0	5 S	31.1	55.1	17	80.9	39.1	6 S	20.3	22
23	65.5	4	22.6	56.0	9 S	43.5	37.9	6 S	19.6	23
24	59.1	4 S	20.4	54.7	8	37.8	36.3	5	15.7	24
25	54.1	3 S	14.0	49.2	7 S	29.8	38.1	6 S	19.8	25
26	51.9	5 S	22.4	52.0	6 S	27.0	36.9	7 S	22.3	26
27	49.4	3	12.8	57.0	5	24.6	36.2	4 S	12.5	27
28	50.8	8 S	35.1	66.0	9 S	51.3	34.0	3	8.81	28
29	52.1	22 S	99.0	69.1	9 S	53.7	33.5	2 S	5.79	29
30	54.0	22	103	61.5	6 S	31.9	32.7	3 S	8.48	30
31	55.5	22 S	105	54.7	4	18.9				31
TOTAL	2 912.0		5 972.8	1 693.1		2 940.5	1 226.9		491.14	TOTAL

A - MANUAL GAUGE E - ESTIMATED 5 - SAMPLE(S) COLLECTED THIS DAY

SOUTH SASKATCHEWAN RIVER AT HIGHWAY NO. 41 - STATION NO. 05AK001

SUSPENDED SEDIMENT FOR 1979

DAY	OCT DAILY DISCHARGE (M3/S)	OCT MEAN CONCENTRATION (MG/L)		OCT DAILY LOAD (TNE)	NOV DAILY DISCHARGE (M3/S)	NOV MEAN CONCENTRATION (MG/L)	NOV DAILY LOAD (TNE)	DEC DAILY DISCHARGE (M3/S)	DEC MEAN CONCENTRATION (MG/L)	DEC DAILY LOAD (TNE)	DAY
1	32.5	4		11.2							1
2	33.8	6	S	17.5							2
3	33.3	6		17.3							3
4	33.1	6	S	17.2							4
5	31.8	5		13.7							5
6	32.0	4	S	11.1							6
7	31.4	4	S	10.9							7
8	31.1	2		5.37							8
9	36.3	3	S	9.41							9
10	37.9	2		6.55							10
11	44.5	4	S	15.4							11
12	47.4	6		24.6							12
13	47.3	4	S	16.3							13
14	46.8	8	S	32.3							14
15	44.8	8		31.0							15
16	42.7	7		25.8							16
17	43.5	6		22.6							17
18	46.5	13	S	52.2							18
19	59.1	37		189							19
20	60.0	28	S	145							20
21	58.2	60	S	302							21
22	59.6	32		165							22
23	58.3	9	S	45.3							23
24	57.4	5		24.8							24
25	55.8	6	S	28.9							25
26	53.0	6		27.5							26
27	52.0	6	S	27.0							27
28	49.6	6	S	25.7							28
29	46.6	8		32.2							29
30	43.3	6	S	22.4							30
31	39.1	5		16.9							31
TOTAL	1 388.7			1 392.13							TOTAL

S - SAMPLE(S) COLLECTED THIS DAY

SOUTH SASKATCHEWAN RIVER AT HIGHWAY NO. 41 - STATION NO. 05AK001

SUSPENDED SEDIMENT FOR 1980

LOCATION: LAT 50 44 15 N LONG 110 05 45 W
DRAINAGE AREA: 66 000 KM2
TYPE OF FLOW: REGULATED
TYPE OF GAUGE: MANUAL

TOTAL SUSPENDED SEDIMENT LOAD 2 150 000 TONNES FOR THE PERIOD APR 01 TO OCT 31

REMARKS:

DAY	APR DAILY DISCHARGE (M3/S)	APR MEAN CONCENTRATION (MG/L)	APR DAILY LOAD (TNE)	MAY DAILY DISCHARGE (M3/S)	MAY MEAN CONCENTRATION (MG/L)	MAY DAILY LOAD (TNE)	JUN DAILY DISCHARGE (M3/S)	JUN MEAN CONCENTRATION (MG/L)	JUN DAILY LOAD (TNE)	DAY
1	92.5 B	54	432	215	109 S	2 020	754	937 S	61 000	1
2	94.5 B	57	465	228	105	2 070	695	863 S	51 800	2
3	97.5 B	58	489	275	226 S	5 370	629	855 S	46 500	3
4	97.9 B	59	499	306	314 S	8 300	600	488 S	25 300	4
5	98.2 B	59	501	286	265	6 550	550	559 S	26 600	5
6	101 B	95	829	267	242 S	5 580	619	384 S	20 500	6
7	118 B	160	1 630	264	222	5 060	758	871 S	57 000	7
8	136 B	154	1 810	261	225 S	5 070	678	970 S	56 800	8
9	143 B	230	2 840	238	170	3 500	622	777 S	41 800	9
10	119 B	357	3 670	273	228 S	5 380	616	1 300 S	69 200	10
11	210	287	5 210	300	325 S	8 420	571	950	46 900	11
12	185	226	3 610	269	261	6 070	539	505 S	23 500	12
13	199	240	4 130	241	193 S	4 020	488	331 S	14 000	13
14	212	252	4 620	240	216	4 480	508	366 S	16 100	14
15	183	218	3 450	225	165 S	3 210	538	373 S	17 300	15
16	195	228	3 840	188	105	1 710	598	736 S	38 000	16
17	239	287	5 930	180	84 S	1 310	653	1 010 S	57 000	17
18	252	296	6 440	190	81 S	1 330	656	853 S	48 300	18
19	235	250	5 080	155	60	804	645	698 S	38 900	19
20	227	241	4 730	114	47 S	463	613	728 S	38 600	20
21	215	215	3 990	102	34	300	597	696 S	35 900	21
22	194	173	2 900	95.0	24 S	197	575	616 S	30 600	22
23	184	185 S	2 940	92.9	27	217	533	582 S	26 800	23
24	181	156	2 440	101	41 S	358	481	483 S	20 100	24
25	192	165	2 740	160	61 S	843	434	307 S	11 500	25
26	178	161	2 480	216	149	2 780	416	698 S	25 100	26
27	165	126 S	1 800	357	708 S	21 800	368	1 970 S	62 600	27
28	181	134	2 100	553	2 130 S	102 000	346	430 S	12 900	28
29	193	163	2 720	1 020	2 990 S	264 000	322	486 S	13 500	29
30	203	129 S	2 260	1 030	4 130 S	368 000	317	321 S	8 790	30
31				862	1 890 S	141 000				31
TOTAL	5 120.6		86 575	9 303.9		982 212	16 719		1 042 890	TOTAL

B - ICE CONDITIONS

S - SAMPLE(S) COLLECTED THIS DAY

SOUTH SASKATCHEWAN RIVER AT HIGHWAY NO. 41 - STATION NO. 05AK001

SUSPENDED SEDIMENT FOR 1980

DAY	JUL DAILY DISCHARGE (M3/S)	JUL MEAN CONCENTRATION (MG/L)	JUL DAILY LOAD (TNE)	AUG DAILY DISCHARGE (M3/S)	AUG MEAN CONCENTRATION (MG/L)	AUG DAILY LOAD (TNE)	SEP DAILY DISCHARGE (M3/S)	SEP MEAN CONCENTRATION (MG/L)	SEP DAILY LOAD (TNE)	DAY
1	290	276 S	6 820	55.9	10	48.3	58.2	6	30.2	1
2	272	175	4 110	59.0	9 S	45.9	62.6	7 S	37.9	2
3	225	131 S	2 550	57.3	11 S	54.5	63.8	6	33.1	3
4	197	94	1 600	52.7	9	41.0	60.0	7 S	36.3	4
5	163	66 S	929	65.3	10 S	56.4	52.9	8	36.6	5
6	147	44 S	559	76.8	9	59.7	50.5	8 S	34.9	6
7	174	100	1 500	92.2	18 S	143	52.4	9 S	40.7	7
8	162	60 S	840	91.5	20	158	47.9	9	37.2	8
9	124	28	300	87.5	29 S	219	43.8	8 S	30.3	9
10	109	18 S	170	73.8	16 S	102	39.2	9	30.5	10
11	95.0	15	123	75.2	13	84.5	43.8	8 S	30.3	11
12	78.9	14 S	95.4	79.4	12 S	82.3	42.7	7	25.8	12
13	77.3	16	107	78.2	13	87.8	47.6	8 S	32.9	13
14	83.9	15	109	77.2	14 S	93.4	43.9	8 S	30.3	14
15	67.7	10 S	58.5	78.9	13	88.6	37.9	8	26.2	15
16	58.6	9	45.6	79.7	14	96.4	38.1	8 S	26.3	16
17	57.0	11 S	54.2	80.6	25 S	174	41.2	8	28.5	17
18	56.5	9	43.9	102	33	291	43.4	8 S	30.0	18
19	56.8	9 S	44.2	86.0	11 S	81.7	44.9	8	31.0	19
20	56.6	20 S	103	73.5	8	50.8	48.2	10 S	41.6	20
21	56.6	21	103	80.5	13 S	90.4	63.9	32 S	177	21
22	55.5	21 S	101	84.2	13	94.6	62.4	30	162	22
23	57.6	20	99.5	76.2	11 S	72.4	58.8	24 S	122	23
24	60.7	18 S	94.4	60.2	10 S	52.0	65.6	34	193	24
25	64.7	16	89.4	68.3	13	76.7	84.1	62 S	451	25
26	85.7	16 S	118	82.8	17 S	122	76.1	32	210	26
27	84.2	15 S	109	71.6	11	68.0	85.5	17 S	126	27
28	71.5	13	80.3	73.2	11 S	69.6	86.6	16 S	120	28
29	62.2	11 S	59.1	74.9	11	71.2	96.0	17	141	29
30	59.3	9	46.1	68.6	11 S	65.2	111	29 S	278	30
31	54.6	8 S	37.7	58.9	9 S	45.8				31
TOTAL	3 266.9		21 189.3	2 322.2		2 886.2	1 753.0		2 630.6	TOTAL

S - SAMPLE(S) COLLECTED THIS DAY

SOUTH SASKATCHEWAN RIVER AT HIGHWAY NO. 41 - STATION NO. 05AK001

SUSPENDED SEDIMENT FOR 1980

OCT

DAY	DAILY DISCHARGE (M3/S)	MEAN CONCENTRATION (MG/L)		DAILY LOAD (TNE)	DAILY DISCHARGE (M3/S)	MEAN CONCENTRATION (MG/L)	DAILY LOAD (TNE)	DAILY DISCHARGE (M3/S)	MEAN CONCENTRATION (MG/L)	DAILY LOAD (TNE)	DAY
1	103	32		285							1
2	103	27	S	240							2
3	97.9	25		211							3
4	88.6	25	S	191							4
5	102	21	S	185							5
6	102	18		159							6
7	97.6	19	S	160							7
8	91.5	17	S	134							8
9	85.8	15	S	111							9
10	91.1	17		134							10
11	86.9	17	S	128							11
12	93.4	19	S	153							12
13	96.0	24		199							13
14	92.7	24	S	192							14
15	86.7	20		150							15
16	99.4	23	S	198							16
17	102	24		212							17
18	111	33	S	316							18
19	189	131	S	2 140							19
20	149	76		978							20
21	141	64	S	780							21
22	147	74		940							22
23	151	106	S	1 380							23
24	145	106		1 330							24
25	132	94	S	1 070							25
26	123	78		829							26
27	120	57	S	591							27
28	120	57		591							28
29	122	57		601							29
30	123	57		606							30
31	121	56		585							31
TOTAL	3 513.6			15 779							TOTAL

S - SAMPLE(S) COLLECTED THIS DAY

SOUTH SASKATCHEWAN RIVER AT HIGHWAY NO. 41 - STATION NO. 05AK001

SUSPENDED SEDIMENT FOR 1981

LOCATION: LAT 50 44 15 N LONG 110 05 45 W
DRAINAGE AREA: 66 000 KM2
TYPE OF FLOW: REGULATED
TYPE OF GAUGE: MANUAL

TOTAL SUSPENDED SEDIMENT LOAD 4 590 000 TONNES FOR THE PERIOD MAR 26 TO NOV 01

REMARKS:

DAY	MAR DAILY DISCHARGE (M3/S)	MAR MEAN CONCENTRATION (MG/L)	MAR DAILY LOAD (TNE)	APR DAILY DISCHARGE (M3/S)	APR MEAN CONCENTRATION (MG/L)	APR DAILY LOAD (TNE)	MAY DAILY DISCHARGE (M3/S)	MAY MEAN CONCENTRATION (MG/L)	MAY DAILY LOAD (TNE)	DAY
1	160 B			120 A	158 S	1 640	168 E	129	1 870	1
2	157 B			118 E	123	1 250	155 A	86 S	1 150	2
3	147 B			118 E	104	1 060	149 A	60 S	772	3
4	140 B			133 A	119 S	1 370	141 E	48	585	4
5	134 B			130 E	145	1 630	140 A	48 S	581	5
6	127 B			128 E	134	1 480	152 E	70	919	6
7	121 B			141 A	152 S	1 850	191 A	164 S	2 710	7
8	118 B			142 E	147	1 800	191 E	173	2 850	8
9	114 B			146 A	99 S	1 250	167 A	109 S	1 570	9
10	112 B			139 E	80	961	146 A	114 S	1 440	10
11	109 B			131 A	79 S	894	152 E	155	2 040	11
12	107 B			127 A	71 S	779	221 A	261 S	4 980	12
13	106 B			125 E	60	648	282 E	464	11 300	13
14	104 B			123 A	54 S	574	280 E	537	13 000	14
15	113 B			122 E	53	559	278 A	474 S	11 400	15
16	127 E			121 A	55 S	575	241 E	391	8 140	16
17	136 E			121 E	57	596	224 A	358 S	6 930	17
18	142 E			120 A	55 S	570	224 E	1 830	35 400	18
19	142 E			122 A	56 S	590	626 A	4 430 S	240 000	19
20	130 E			121 E	54	565	632 A	3 570 S	195 000	20
21	135 E			121 A	54 S	565	584 A	1 730 S	87 300	21
22	131 A			120 E	52	539	727 A	2 170 S	136 000	22
23	125 E			119 A	51 S	524	704 A	1 280 S	77 900	23
24	110 E			118 E	57	581	1 140 A	2 500 S	246 000	24
25	108 E			116 A	65 S	651	1 540 A	4 350 S	579 000	25
26	118 E	120 S	1 220	116 A	49 S	491	1 550 A	3 660 S	490 000	26
27	126 E			119 E	41	422	1 440 A	2 400 S	299 000	27
28	133 A	465 S	5 340	121 A	41 S	429	1 500 A	1 930 S	250 000	28
29	131 E			128 E	60	664	1 630	1 980 S	279 000	29
30	128 E			167 A	106 S	1 530	1 460	1 840 S	232 000	30
31	122 E						1 300	1 400 S	157 000	31
TOTAL	3 913		6 560	3 793		27 037	18 325		3 375 837	TOTAL

A - MANUAL GAUGE B - ICE CONDITIONS E - ESTIMATED S - SAMPLE(S) COLLECTED THIS DAY

SOUTH SASKATCHEWAN RIVER AT HIGHWAY NO. 41 - STATION NO. 05AK001

SUSPENDED SEDIMENT FOR 1981

DAY	JUN DAILY DISCHARGE (M3/S)	JUN MEAN CONCENTRATION (MG/L)	JUN DAILY LOAD (TNE)	JUL DAILY DISCHARGE (M3/S)	JUL MEAN CONCENTRATION (MG/L)	JUL DAILY LOAD (TNE)	AUG DAILY DISCHARGE (M3/S)	AUG MEAN CONCENTRATION (MG/L)	AUG DAILY LOAD (TNE)	DAY
1	1 130	1 000 S	97 600	345 E	117	3 490	322 A	170 S	4 730	1
2	969	818 S	68 500	398 A	176 S	6 050	328 A	85 S	2 410	2
3	860	781 S	58 000	377 A	132 S	4 300	320 A	87 S	2 410	3
4	843	1 210 S	88 100	397 A	136 S	4 660	374 A	132 S	4 270	4
5	854	659 S	48 600	371 A	111 S	3 560	400 A	178	6 150	5
6	842	522 S	38 000	384 A	132 S	4 380	368	132 S	4 200	6
7	767	624 S	41 400	407 A	144 S	5 060	310	68 S	1 820	7
8	722	658	41 000	377 A	136 S	4 430	302	52	1 360	8
9	668	412 S	23 800	371 A	133 S	4 260	304	74 S	1 940	9
10	621	337 S	18 100	416 A	144 S	5 180	284	57	1 400	10
11	575	332 S	16 500	429 A	138 S	5 120	264	56 S	1 280	11
12	539	322 S	15 000	382 A	139	4 590	256	56	1 240	12
13	502	370 S	16 000	360 A	132 S	4 110	227	36	706	13
14	470	309 S	12 500	331 A	85 S	2 430	236	82 S	1 670	14
15	470	312 S	12 700	330 A	81 S	2 310	232	67	1 340	15
16	589	620	31 600	291 A	58 S	1 460	224	46 S	890	16
17	1 000	1 150 S	99 400	281 E	48	1 170	222	48	921	17
18	888	1 130 S	86 700	271 A	68 S	1 590	209	40 S	722	18
19	792	717 S	49 100	322 A	128 S	3 560	206	26	463	19
20	759	559 S	36 700	345 E	147	4 380	226	53 S	1 030	20
21	680	408 S	24 000	367 A	117 S	3 710	221	48	917	21
22	611	301 S	15 900	384 A	113 S	3 750	201	39 S	677	22
23	579	332 S	16 600	501 A	127 S	5 500	198	40 S	684	23
24	530 A	277 S	12 700	489 A	155 S	6 550	218	66	1 240	24
25	507 A	218 S	9 550	358 A	78 S	2 410	205	43 S	762	25
26	462 A	164 S	6 550	348 A	96 S	2 890	161	31	431	26
27	429 A	205 S	7 600	332 A	160 S	4 590	163	43 S	606	27
28	357 A	150 S	4 630	366 A	79 S	2 500	185	45	719	28
29	325 E	108	3 030	385 A	154 S	5 120	156	27 S	364	29
30	293 A	81 S	2 050	400 A	128 S	4 420	141	22 S	268	30
31				355 A	113 S	3 470	141	22	268	31
TOTAL	19 633		1 001 910	11 470		121 000	7 604		47 888	TOTAL

A - MANUAL GAUGE E - ESTIMATED S - SAMPLE(S) COLLECTED THIS DAY

SOUTH SASKATCHEWAN RIVER AT HIGHWAY NO. 41 - STATION NO. 05AK001

SUSPENDED SEDIMENT FOR 1981

DAY	SEP DAILY DISCHARGE (M3/S)	SEP MEAN CONCENTRATION (MG/L)	SEP DAILY LOAD (TNE)	OCT DAILY DISCHARGE (M3/S)	OCT MEAN CONCENTRATION (MG/L)	OCT DAILY LOAD (TNE)	NOV DAILY DISCHARGE (M3/S)	NOV MEAN CONCENTRATION (MG/L)	NOV DAILY LOAD (TNE)	DAY
1	142	22 S	270	44.5	11 S	42.3	44.1	18 S	68.6	1
2	147	27	343	47.2	10	40.8	38.5			2
3	141	28 S	341	47.5	11 S	45.1	39.3			3
4	136	27	317	50.7	19 S	83.2	55.1			4
5	143	26 S	321	50.1	23	99.6	95.8			5
6	126	26 S	283	45.7	15 S	59.2	72.1			6
7	131	29	328	43.7	14	52.9	132			7
8	126	23 S	250	42.5	12 S	44.1	109			8
9	127	21	230	41.4	11	39.3	112			9
10	107	22 S	203	41.3	14	50.0	112			10
11	104	42	377	42.7	23	84.9	102			11
12	95.8	26 S	215	43.4	28 S	105	91.5			12
13	95.3	21 S	173	44.0	33	125	84.4			13
14	84.2	16	116	44.7	36 S	139	86.7			14
15	66.7	13 S	74.9	45.6	38	150	93.9			15
16	67.4	17	99.0	45.9	34	135	92.9			16
17	73.6	19 S	121	45.1	23 S	89.6	97.4			17
18	72.1	14	87.2	44.3	24 S	91.9	93.3			18
19	65.8	13 S	73.9	42.8	24	88.8	92.7			19
20	91.5	26 S	206	42.2	23 S	83.9	94.9			20
21	66.7	13	74.9	41.7	19	68.5	94.9			21
22	55.6	11 S	52.8	40.3	17	59.2	93.9			22
23	58.2	15	75.4	38.6	13 S	43.4	94.4			23
24	51.0	12 S	52.9	37.0	11	35.2	93.2			24
25	47.1	13	52.9	36.2	12	37.5	92.1			25
26	47.5	15 S	61.6	35.6	14 S	43.1	73.4			26
27	44.2	11 S	42.0	35.2	15	45.6	75.9			27
28	66.4	27	155	44.8	20 S	77.4	81.0 B			28
29	61.4	18 S	95.5	45.1	12	46.8	70.3 B			29
30	49.4	13	55.5	45.2	12 S	46.9	34.9 B			30
31				45.8	16	63.3				31
TOTAL	2 689.9		5 147.5	1 340.8		2 216.5	2 543.6		68.6	TOTAL

B - ICE CONDITIONS

S - SAMPLE(S) COLLECTED THIS DAY

SOUTH SASKATCHEWAN RIVER AT HIGHWAY NO. 41 - STATION NO. 05AK001

SUSPENDED SEDIMENT FOR 1982

LOCATION: LAT 50 44 15 N LONG 110 05 45 W
DRAINAGE AREA: 66 000 KM2
TYPE OF FLOW: REGULATED
TYPE OF GAUGE: MANUAL

TOTAL SUSPENDED SEDIMENT LOAD 1 570 000 TONNES FOR THE PERIOD APR 20 TO OCT 31

REMARKS:

	APR			MAY			JUN			
DAY	DAILY DISCHARGE (M3/S)	MEAN CONCENTRATION (MG/L)	DAILY LOAD (TNE)	DAILY DISCHARGE (M3/S)	MEAN CONCENTRATION (MG/L)	DAILY LOAD (TNE)	DAILY DISCHARGE (M3/S)	MEAN CONCENTRATION (MG/L)	DAILY LOAD (TNE)	DAY
1	88.5 B			159	74 S	1 020	357	951 S	29 300	1
2	89.0 B			169	93 S	1 360	331	951 S	27 200	2
3	81.5 B			163	134	1 890	295	648 S	16 500	3
4	78.0 B			152	79 S	1 040	281	566 S	13 700	4
5	75.5 B			157	61	827	270	524	12 200	5
6	73.5 B			182	122 S	1 920	268	538 S	12 500	6
7	69.3 B			156	75	1 010	255	537	11 800	7
8	67.3 B			152	110 S	1 440	298	632 S	16 300	8
9	65.2 B			160	77 S	1 060	393	651	22 100	9
10	64.2 B			166	107	1 530	427	635 S	23 400	10
11	63.2 B			165	78 S	1 110	445	764 S	29 400	11
12	63.7 B			165	65	927	469	864 S	35 000	12
13	70.8 B			165	51 S	727	412	850 S	30 300	13
14	87.8 B			151	33	431	385	740 S	24 600	14
15	104 B			131	28 S	317	428	507 S	18 700	15
16	111 B			119	28 S	288	446 E	663 S	25 500	16
17	116 B			104	25	225	543 E	944 S	44 300	17
18	122 B			89.6	16 S	124	533 E	1 120 S	51 600	18
19	135 B			96.9	53	444	606 E	998 S	52 300	19
20	148 B	259 S	3 310	118	75 S	765	614 E	762 S	40 400	20
21	154 B	255	3 390	151	51	665	559 E	770 S	37 200	21
22	160 B	276 S	3 820	161	47 S	654	637 E	843 S	46 400	22
23	165 B	275	3 920	179	68 S	1 050	602 E	636 S	33 100	23
24	224	237 S	4 590	183	72	1 140	585 E	524 S	26 500	24
25	240	242 S	5 020	183	72 S	1 140	559 E	567 S	27 400	25
26	210	111	2 010	184	108 S	1 720	517 E	355 S	15 900	26
27	185	144 S	2 300	183	158 S	2 500	470 E	410 S	16 600	27
28	199	127	2 180	190	201	3 300	497 E	418 S	17 900	28
29	205	141 S	2 500	215	341 S	6 330	486 E	653 S	27 400	29
30	181	84	1 310	282	612 S	14 900	483 E	432 S	18 000	30
31				350	891	26 900				31
TOTAL	3 696.5		34 350	5 182.5		78 754	13 451		803 500	TOTAL

B - ICE CONDITIONS E - ESTIMATED S - SAMPLE(S) COLLECTED THIS DAY

SOUTH SASKATCHEWAN RIVER AT HIGHWAY NO. 41 - STATION NO. 05AK001

SUSPENDED SEDIMENT FOR 1982

DAY	JUL DAILY DISCHARGE (M3/S)		JUL MEAN CONCENTRATION (MG/L)		JUL DAILY LOAD (TNE)	AUG DAILY DISCHARGE (M3/S)	AUG MEAN CONCENTRATION (MG/L)		AUG DAILY LOAD (TNE)	SEP DAILY DISCHARGE (M3/S)	SEP MEAN CONCENTRATION (MG/L)		SEP DAILY LOAD (TNE)	DAY
1	466	E	885	S	35 600	152	64	S	840	47.6	9		37.0	1
2	469	E	682	S	27 600	118	22		224	49.7	9		38.6	2
3	481	E	1 150	S	47 800	115	26	S	258	48.1	10		41.6	3
4	563	E	1 490	S	72 500	119	36		370	51.5	10		44.5	4
5	582	E	1 450	S	72 900	121	39	S	408	48.9	11	S	46.5	5
6	556	E	1 290	S	62 000	111	34		326	46.0	12		47.7	6
7	539	E	1 950	S	90 800	93.0	19	S	153	59.1	13		66.4	7
8	541	E	2 000	S	93 500	95.7	22	S	182	56.6	14		68.5	8
9	548	E	716	S	33 900	98.5	36		306	49.6	12		51.4	9
10	454	E	480	S	18 800	90.5	19	S	149	45.8	10		39.6	10
11	398	E	274	S	9 420	90.5	16		125	44.9	10		38.8	11
12	323	E	210		5 860	85.9	17	S	126	44.5	6	S	23.1	12
13	295	E	203	S	5 170	72.0	13		80.9	48.5	7		29.3	13
14	281	E	219		5 320	60.8	12	S	63.0	56.8	10	S	49.1	14
15	225	E	229	S	4 450	54.8	15	S	71.0	53.8	8		37.2	15
16	230	E	209		4 150	57.5	29		144	44.9	8	S	31.0	16
17	204	E	210	S	3 700	59.2	43	S	220	47.9	7		29.0	17
18	223	E	390	S	7 510	68.5	55		326	56.9	8	S	39.3	18
19	217	E	367		6 880	75.9	25	S	164	73.7	11	S	70.0	19
20	200	E	316		5 460	69.4	38		228	71.5	11		68.0	20
21	175	E	276		4 170	59.2	13	S	66.5	60.3	11	S	57.3	21
22	195	E	235		3 960	53.7	11	S	51.0	50.9	9		39.6	22
23	180	E	194		3 020	48.6	12		50.4	45.4	8	S	31.4	23
24	134	E	157		1 820	45.8	10	S	39.6	43.2	8		29.9	24
25	129	E	121		1 350	46.4	9		36.1	42.1	7	S	25.5	25
26	109	E	99		932	50.5	10	S	43.6	48.2	8	S	33.3	26
27	94.5	A	76	S	621	53.6	12		55.6	50.1	18		77.9	27
28	148		108	S	1 380	49.9	13	S	56.0	50.4	23		100	28
29	164		112		1 590	48.0	12	S	49.8	55.6	34	S	163	29
30	154		91	S	1 210	47.6	12		49.4	58.3	34		171	30
31	157		117		1 590	48.0	9	S	37.3					31
TOTAL	9 434.5				634 963	2 359.5			5 299.2	1 550.8			1 625.5	TOTAL

A - MANUAL GAUGE E - ESTIMATED S - SAMPLE(S) COLLECTED THIS DAY

SOUTH SASKATCHEWAN RIVER AT HIGHWAY NO. 41 - STATION NO. 05AK001

SUSPENDED SEDIMENT FOR 1982

DAY	OCT DAILY DISCHARGE (M3/S)	OCT MEAN CONCENTRATION (MG/L)	OCT DAILY LOAD (TNE)	NOV DAILY DISCHARGE (M3/S)	NOV MEAN CONCENTRATION (MG/L)	NOV DAILY LOAD (TNE)	DEC DAILY DISCHARGE (M3/S)	DEC MEAN CONCENTRATION (MG/L)	DEC DAILY LOAD (TNE)	DAY
1	62.3	31	167							1
2	65.3	43 S	243							2
3	102	90 S	793							3
4	86.7	59	442							4
5	74.0	50 S	320							5
6	70.9	40	245							6
7	68.1	30 S	177							7
8	76.1	49	322							8
9	86.8	42 S	315							9
10	76.2	27 S	178							10
11	69.1	22	131							11
12	68.1	20 S	118							12
13	71.6	22	136							13
14	66.9	21 S	121							14
15	68.0	21	123							15
16	65.7	24 S	136							16
17	66.8	52 S	300							17
18	65.7	41	233							18
19	82.1	31 S	220							19
20	119	70	720							20
21	106	41 S	375							21
22	100	42	363							22
23	95.7	40 S	331							23
24	92.0	39 S	310							24
25	99.8	40	345							25
26	101	56 S	489							26
27	109	52	490							27
28	109	50 S	471							28
29	152	202	2 650							29
30	141	176	2 140							30
31	102	59 S	520							31
TOTAL	2 718.8		13 924							TOTAL

S - SAMPLE(S) COLLECTED THIS DAY

SOUTH SASKATCHEWAN RIVER AT HIGHWAY NO 41 - STATION NO 05AK001

SUSPENDED SEDIMENT FOR 1983

LOCATION: LAT 50 44 15 N LONG 110 08 45 W
DRAINAGE AREA: 46 000 KM2
TYPE OF FLOW: REGULATED
TYPE OF GAUGE: MANUAL

TOTAL SUSPENDED SEDIMENT LOAD 416 000 TONNES FOR THE PERIOD MAR 01 TO OCT 21

REMARKS:

DAY	MAR DAILY DISCHARGE (M3/S)	MAR MEAN CONCENTRATION (MG/L)	MAR DAILY LOAD (TNE)	APR DAILY DISCHARGE (M3/S)	APR MEAN CONCENTRATION (MG/L)	APR DAILY LOAD (TNE)	MAY DAILY DISCHARGE (M3/S)	MAY MEAN CONCENTRATION (MG/L)	MAY DAILY LOAD (TNE)	DAY
1	88.8 B	98 S	752	100 E	169	1 460	200	226 S	3 910	1
2	95.2 B			117 E	197 S	1 950	193	220	3 670	2
3	96.0 B			136 E	174	2 040	194	204 S	3 420	3
4	94.5 B			116 E	93	932	161	164	2 280	4
5	93.2 B			96.6 E	40 S	534	134	109 S	1 260	5
6	87.8 B			94.7 E	36	295	111	67	643	6
7	81.7 B			93.4 E	37 S	299	88.6	42 S	322	7
8	82.7 B			91.1 E	38	299	101	57 S	497	8
9	88.5 B			89.4 E	39	301	107	58	536	9
10	84.1 B			87.8 E	38 S	296	109	60 S	565	10
11	83.5 B			92.2 E	36	287	108	51	478	11
12	85.7 B			90.8 E	32 S	251	110	66 S	627	12
13	97.5 B			84.1 E	35	254	132	86	1 090	13
14	114 B			94.2 E	38 S	309	126	58 S	631	14
15	135 B			92.3 E	34	271	122	76 S	801	15
16	145 B			89.8 E	30 S	233	120	63	653	16
17	160 B			84.8 E	26 S	190	113	43 S	420	17
18	139 B			80.7 E	22	153	107	48	444	18
19	116 B			78.8 A	18 S	123	106	51 S	463	19
20	107 B			68.7 A	15	89.0	98.2	34	288	20
21	116 B			72.8	13 S	81.8	95.4	20 S	165	21
22	128 B			72.5	15	94.0	104	26 S	234	22
23	126 B			69.1	14 S	83.6	117	50 S	505	23
24	118 B			75.5	21 S	137	130	44 S	494	24
25	84.5 B			73.7	170	1 080	143	52	642	25
26	86.2 B			82.7	377 S	2 690	146	54 S	681	26
27	85.2 B			108	216 S	2 020	166	78	1 120	27
28	80.7 B			161	131 S	1 820	206	123 S	2 180	28
29	81.3 B			182	255 S	4 010	241	189 S	3 940	29
30	93.1 B			235	261 S	5 300	311	390 S	10 500	30
31	103 B						315	498 S	13 600	31
TOTAL	3 177.2		752	3 010.7		27 722.4	4 914.2		57 067	TOTAL

A - MANUAL GAUGE B - ICE CONDITIONS E - ESTIMATED S - SAMPLE(S) COLLECTED THIS DAY

SOUTH SASKATCHEWAN RIVER AT HIGHWAY NO. 41 - STATION NO. 05AK001

SUSPENDED SEDIMENT FOR 1983

DAY	JUN DAILY DISCHARGE (M3/S)	JUN MEAN CONCENTRATION (MG/L)	JUN DAILY LOAD (TNE)	JUL DAILY DISCHARGE (M3/S)	JUL MEAN CONCENTRATION (MG/L)	JUL DAILY LOAD (TNE)	AUG DAILY DISCHARGE (M3/S)	AUG MEAN CONCENTRATION (MG/L)	AUG DAILY LOAD (TNE)	DAY
1	377 A	635 S	20 700	121	92	962	70.6	21	128	1
2	368	817 S	26 000	125	66 S	713	65.6	18 S	102	2
3	387	634 S	21 200	139	362 S	4 350	57.2	14	69.2	3
4	399	620 S	21 400	138	280	3 340	54.2	15 S	70.2	4
5	358	427 S	13 200	123	75 S	797	54.4	14	65.8	5
6	337	565 S	16 500	121	48 S	502	57.1	10 S	49.3	6
7	309	408 S	10 900	134	85 S	984	50.0	8 S	34.6	7
8	288	348 S	8 660	188	150	2 440	46.7	10	40.3	8
9	263	268	6 090	200	153 S	2 640	44.6 E	7 S	27.0	9
10	252	258 S	5 620	182	118 S	1 860	47.6	9	37.0	10
11	243	225	4 720	175	105	1 590	48.5	13 S	54.5	11
12	225	196 S	3 810	156	97 S	1 310	56.1	93	451	12
13	236	162	3 300	187	157	2 540	64.2	168 S	932	13
14	224	183 S	3 540	183	88 S	1 390	69.6	53 S	319	14
15	237	246	5 040	161	52	723	66.3	31	178	15
16	230	270 S	5 370	149	53 S	682	71.3	23 S	142	16
17	191	110	1 820	133	37 S	425	81.5	22	155	17
18	190	140 S	2 300	112	18	174	74.2	21 S	135	18
19	172 E	202 S	3 000	122	72 S	759	72.6	20	125	19
20	152 A	131	1 720	144	1 100	13 700	67.6	22 S	128	20
21	129	66 S	736	187	2 720 S	43 900	73.1	20 S	126	21
22	137	93	1 100	163	2 230	31 400	62.5	14	75.6	22
23	133	64 S	735	151	705 S	9 200	68.0	12 S	70.5	23
24	126	75	816	132	264 S	3 010	92.6	27	216	24
25	130	76 S	854	114	144	1 420	83.6	18	130	25
26	133	69 S	793	92.7	55 S	441	68.9	13	77.4	26
27	121	60	627	85.1	34	250	59.1	11 S	56.2	27
28	114	52 S	512	80.3	32 S	222	51.7	9 S	40.2	28
29	116	76	762	73.4	15	95.1	48.6	10	42.0	29
30	111	55 S	527	64.1	28 S	155	47.2	7 S	28.5	30
31				65.9	27	154	52.0	8	35.9	31
TOTAL	6 688		192 352	4 201.5		132 128.1	1 927.2		4 141.2	TOTAL

A - MANUAL GAUGE E - ESTIMATED S - SAMPLE(S) COLLECTED THIS DAY

SOUTH SASKATCHEWAN RIVER AT HIGHWAY NO. 41 - STATION NO. 05AK001

SUSPENDED SEDIMENT FOR 1983

DAY	SEP DAILY DISCHARGE (M3/S)	SEP MEAN CONCENTRATION (MG/L)	SEP DAILY LOAD (TNE)	OCT DAILY DISCHARGE (M3/S)	OCT MEAN CONCENTRATION (MG/L)	OCT DAILY LOAD (TNE)	DAILY DISCHARGE (M3/S)	MEAN CONCENTRATION (MG/L)	DAILY LOAD (TNE)	DAY
1	51.4	9 S	40.0	33.4	6 S	17.3				1
2	46.5	9	36.2	33.8	9 S	26.3				2
3	44.4	9 S	34.5	35.0	9	27.2				3
4	44.9	8 S	31.0	34.6	8 S	23.9				4
5	40.9	9	31.8	35.3	7	21.3				5
6	41.4	10 S	35.8	36.7	6 S	19.0				6
7	43.2	9	33.6	36.9	12	38.3				7
8	44.3	9 S	34.4	36.1	15 S	46.8				8
9	44.2	12	45.8	35.7	7 S	21.6				9
10	48.0	16 S	66.4	36.1	6	18.7				10
11	46.3	22 S	88.0	39.4	7	23.8				11
12	43.1	16	59.6	41.4	7	25.0				12
13	45.0	8 S	31.1	42.5	8 S	29.4				13
14	46.3	8	32.0	43.1	8	29.8				14
15	43.9	10 S	37.9	44.3	8 S	30.6				15
16	43.3	10	37.4	43.6	9 S	33.9				16
17	40.9	10 S	35.3	40.4	8	27.9				17
18	41.2	10 S	35.6	37.4	7	22.6				18
19	38.6	9	30.0	36.5	6 S	18.9				19
20	36.1	7 S	21.8	36.0	6	18.7				20
21	39.8	7	24.1	35.3	7	21.3				21
22	39.0	6 S	20.2	34.8	8 S	24.1				22
23	37.0	5	16.0	34.5	8	23.8				23
24	36.7	5 S	15.9	33.9	8	23.4				24
25	35.4	4 S	12.2	34.0	8	23.5				25
26	33.3	7	20.1	33.4	8 S	23.1				26
27	32.1	9 S	25.0	34.8	10	30.1				27
28	32.3	8	22.3	32.4	11 S	30.8				28
29	32.6	8 S	22.5	35.4	10	30.6				29
30	32.5	7	19.7	36.9	9	28.7				30
31				36.8 E	8 S	25.4				31
TOTAL	1 224.6		996.2	1 140.4		805.8				TOTAL

E - ESTIMATED S - SAMPLE(S) COLLECTED THIS DAY

SOUTH SASKATCHEWAN RIVER AT HIGHWAY NO. 41 - STATION NO. 05AK001

SUSPENDED SEDIMENT FOR 1984

LOCATION: LAT 50 44 15 N LONG 110 05 45 W
DRAINAGE AREA: 66 000 KM2
TYPE OF FLOW: REGULATED
TYPE OF GAUGE: MANUAL

TOTAL SUSPENDED SEDIMENT LOAD 117 000 TONNES FOR THE PERIOD APR 01 TO OCT 21

REMARKS:

DAY	APR DAILY DISCHARGE (M3/S)	APR MEAN CONCENTRATION (MG/L)	APR DAILY LOAD (TNE)	MAY DAILY DISCHARGE (M3/S)	MAY MEAN CONCENTRATION (MG/L)	MAY DAILY LOAD (TNE)	JUN DAILY DISCHARGE (M3/S)	JUN MEAN CONCENTRATION (MG/L)	JUN DAILY LOAD (TNE)	DAY
1	83.4 E	31 S	223	62.8	7 S	38.0	59.9	30 S	155	1
2	89.4 E	33	255	56.5	6	29.3	56.9	21 S	103	2
3	87.3 A	33 S	249	48.0	6 S	24.9	54.7	18 S	85.1	3
4	82.2	29	206	36.1	6	18.7	70.2	22 S	133	4
5	80.5	24 S	167	30.2	6 S	15.7	124	57 S	611	5
6	75.2	21	136	27.0	12 S	28.0	114	63 S	621	6
7	69.9	19 S	115	24.3	12	25.2	102	57 S	502	7
8	62.8	19 S	103	23.0	12	23.8	89.6	78 S	604	8
9	77.4	24	160	20.7	11	19.7	88.9	59 S	453	9
10	75.7	23 S	150	22.9	9 S	17.8	84.5	51 S	372	10
11	68.3	18	106	20.7	8	14.3	86.2	45 S	335	11
12	66.5	17 S	97.7	19.7	8 S	13.6	99.5	59 S	507	12
13	68.4	17	100	16.9	6 S	8.76	148	117 S	1 500	13
14	69.1	17 S	101	16.6	5	7.17	197	188 S	3 200	14
15	69.0	18 S	107	21.7	25 S	46.9	191	118 S	1 950	15
16	68.2	16	94.3	28.8	87 S	216	176	134	2 040	16
17	62.0	14 S	75.0	34.3	69 S	204	164	183 S	2 590	17
18	55.7	11	52.9	29.8	37 S	95.3	175	164 S	2 480	18
19	63.1	11 S	60.0	24.2	19 S	39.7	220	193 S	3 670	19
20	78.5	17	115	25.4	17 S	37.3	247	199 S	4 250	20
21	75.9	12 S	78.7	27.5	30 S	71.3	251	195 S	4 230	21
22	63.5	12 S	65.8	88.0	81 S	616	250	304 S	6 570	22
23	59.5	10	51.4	83.7	52 S	376	263	365 S	8 290	23
24	60.2	9 S	46.8	75.5	38 S	249	251	403 S	8 740	24
25	68.4	12	84.0	82.4	24 S	171	231	378 S	7 540	25
26	74.2	20 S	128	93.4	30 S	242	220	479 S	9 100	26
27	81.7	16	113	83.1	25 S	179	196	315 S	5 330	27
28	79.6	13 S	89.4	75.0	23 S	149	190	162 S	2 660	28
29	72.8	10 S	62.9	74.7	22 S	142	200	215 S	3 720	29
30	65.2	8	45.1	72.5	23 S	144	190	161 S	2 640	30
31				65.2	33 S	186				31
TOTAL	2 153.6		3 448.6	1 410.6		3 448.43	4 790.4		84 981.1	TOTAL

A - MANUAL GAUGE E - ESTIMATED S - SAMPLE(S) COLLECTED THIS DAY

SOUTH SASKATCHEWAN RIVER AT HIGHWAY NO. 41 - STATION NO. 05AK001

SUSPENDED SEDIMENT FOR 1984

DAY	JUL DAILY DISCHARGE (M3/S)	JUL MEAN CONCENTRATION (MG/L)	JUL DAILY LOAD (TNE)	AUG DAILY DISCHARGE (M3/S)	AUG MEAN CONCENTRATION (MG/L)	AUG DAILY LOAD (TNE)	SEP DAILY DISCHARGE (M3/S)	SEP MEAN CONCENTRATION (MG/L)	SEP DAILY LOAD (TNE)	DAY
1	204	135 S	2 380	43.2	6	22.4	26.0 E	11	24.7	1
2	202	132	2 300	46.1	8	31.9	25.0 E	11	23.8	2
3	203	118	2 070	52.7	11	50.1	25.0 E	11	23.8	3
4	236	124 S	2 530	56.8	17	83.4	25.0 E	11	23.8	4
5	239	132	2 730	71.3	34	209	24.3 A	11	23.1	5
6	224	116	2 250	79.1	43 S	294	25.3	15	32.8	6
7	230	116 S	2 310	75.5	34	222	29.0	18	45.1	7
8	187	94 S	1 520	62.1	23	123	33.2	19	54.5	8
9	148	66	844	59.1	20	102	37.7	18 S	58.6	9
10	109	36 S	339	62.2	24	129	36.4	13	40.9	10
11	83.2	22 S	158	59.7	23	119	37.9	12 S	39.3	11
12	77.2	20	133	50.6	20	87.4	43.3	16	59.9	12
13	83.2	29	208	47.4	16 S	65.5	50.9	15	66.0	13
14	81.0 A	21 S	147	49.3	15	63.9	52.1	17	76.5	14
15	76.4 E	15 S	99.0	44.6	15	57.8	50.9	15	66.0	15
16	71.7 E	14	85.7	43.3	14	52.4	40.2	13 S	45.2	16
17	67.1 E	12	69.6	40.3	14	48.7	31.6	13	35.5	17
18	62.4 E	10 S	53.9	37.6	13 S	42.2	26.4	12	27.4	18
19	57.8 E	10	49.9	36.7	14	44.4	23.9	12	24.8	19
20	53.1 E	10	45.9	34.6	14	41.9	35.0	19	57.5	20
21	48.5 E	10 S	41.9	34.8	14	42.1	33.4	16	46.2	21
22	39.2 E	9 S	30.5	34.9	17	51.3	29.3	17	43.0	22
23	38.3 E	8	26.5	34.8	18	54.1	30.8	21	55.9	23
24	34.5 A	5 S	14.9	34.0	16	47.0	29.4	24	61.0	24
25	34.3	6 S	17.8	31.9	13	35.8	24.9	26 S	55.9	25
26	34.5	6	17.9	29.6	11 S	28.1	24.9	25	53.8	26
27	35.1	6	18.2	28.0	11	26.6	27.5	25	59.4	27
28	36.7	6	19.0	26.8	12	27.8	26.4	25	57.0	28
29	36.3	6 S	18.8	28.8	14	34.8	37.2	28	90.0	29
30	40.8	7	24.7	28.7 A	11	27.3	46.5	19 S	76.3	30
31	42.1	6	21.8	27.0 E	10 S	23.3				31
TOTAL	3 115.4		20 576.0	1 391.5		2 288.2	989.4		1 447.7	TOTAL

A - MANUAL GAUGE E - ESTIMATED S - SAMPLE(S) COLLECTED THIS DAY

SOUTH SASKATCHEWAN RIVER AT HIGHWAY NO. 41 - STATION NO. 05AK001

SUSPENDED SEDIMENT FOR 1984

DAY	OCT DAILY DISCHARGE (M3/S)	OCT MEAN CONCENTRATION (MG/L)	OCT DAILY LOAD (TNE)	NOV DAILY DISCHARGE (M3/S)	NOV MEAN CONCENTRATION (MG/L)	NOV DAILY LOAD (TNE)	DEC DAILY DISCHARGE (M3/S)	DEC MEAN CONCENTRATION (MG/L)	DEC DAILY LOAD (TNE)	DAY
1	45.2	17	66.4							1
2	39.1	18 S	60.8							2
3	35.2	17	51.7							3
4	35.2	17	51.7							4
5	32.9	15	42.6							5
6	29.5	14	35.7							6
7	29.8	13 S	33.5							7
8	33.7	17	49.5							8
9	34.6	16	47.8							9
10	32.9	15	42.6							10
11	31.0	15	40.2							11
12	31.9	19	52.4							12
13	34.2	21 S	62.1							13
14	34.2	19	56.1							14
15	33.9	19	55.7							15
16	33.4	19	54.8							16
17	33.3	19	54.7							17
18	35.1	23	69.8							18
19	36.9	28	89.3							19
20	37.4	30	96.9							20
21	36.3	31 S	97.2							21
22	32.9									22
23	29.1									23
24	30.0									24
25	28.8									25
26	28.5									26
27	31.4 B									27
28	35.3 B									28
29	31.9 B									29
30	22.5 B									30
31	15.6 B									31
TOTAL	1 011.7		1 211.5							TOTAL

B - ICE CONDITIONS

S - SAMPLE(S) COLLECTED THIS DAY

APPENDIX F

BED MATERIAL PARTICLE SIZE DATA 1966 TO 1978

The data includes 21 measurements consisting of at least one sample collected from the streambed at 5 verticals in the cross section.

SOUTH SASKATCHEWAN RIVER AT HIGHWAY NO. 41

STATION NO. 05AK001

BED MATERIAL PARTICLE-SIZE ANALYSIS FOR 1966

DATE	TIME	PANEL DISCHARGE (M3/S)	SAMPLING VERTICAL (M)	TYPE OF SAMPLER	PERCENT FINER THAN INDICATED SIZE, IN MILLIMETRES													
					.004	.008	.016	.031	.062	.125	.250	.500	1.00	2.00	4.00	8.00	16.00	32.00	64.00
[illegible]AY	05 18:00		18.3	SCOOP			10	14	27	86	100								
[illegible]	05 18:10		32.0	SCOOP			9	13	20	36	50	54	56	57	61	70	91	100	
[illegible]	05 18:20	31.5	61.0	LANE						3	46	90	99	100					
[illegible]Y	05 18:30	41.5	91.4	LANE							27	87	98	99	100				
MAY	05 18:40	30.9	113	LANE							16	84	94	97	98	99	100		
MAY	05 18:50	46.7	122	LANE							13	79	93	97	99	100			
MAY	05 19:00	48.8	158	LANE			11	16	29	70	92	98	99	100					
MAY	05 19:10		196	SCOOP			16	28	48	73	80	82	84	86	93	98	100		
JUN	08 18:30		201	SCOOP		13	18	26	41	72	97	99	100						
JUN	08 18:40		174	LANE	NO MATERIAL COLLECTED														
JUN	08 18:50		146	LANE	NO MATERIAL COLLECTED														
JUN	08 19:00	304	113	LANE							1	8	42	77	88	94	100		
JUN	08 19:10	244	82	LANE						5	19	87	91	94	96	100			
JUN	08 19:20	200	55	LANE						4	80	100							
JUN	08 19:30		12	SCOOP	14	18	24	36	70	97	99	100							
AUG	17 17:05		195	SCOOP	9	12	18	28	55	92	99	100							
AUG	17 17:15	24.6	158	LANE					6	34	75	94	100						
AUG	17 17:30	30.6	134	LANE							14	87	94	98	99	100			
AUG	17 17:45	30.6	116	LANE							28	94	97	99	100				
AUG	17 18:00	28.5	94.6	LANE							17	95	99	100					
AUG	17 18:15	26.2	70.1	LANE							14	95	100						
AUG	17 18:30		36.6	SCOOP	10	12	16	22	34	54	67	67	68	68	68	71	83	100	
OCT	21 10:20		195	SCOOP	12	16	21	28	45	73	85	90	94	96	97	99	100		
OCT	21 10:30	22.6	157	LANE			11	13	19	35	80	97	98	98	98	99	100		
OCT	21 10:45	26.0	134	LANE							5	90	93	94	94	96	100		
OCT	21 11:00	24.5	116	LANE						3	54	87	99	100					
OCT	21 11:15	23.9	97.5	LANE						1	39	100							
OCT	21 11:30	21.6	71.6	LANE						1	30	95	98	98	99	100			
OCT	21 11:45		37.2	SCOOP					3	6	10	14	16	16	16	17	20	36	75	100

SOUTH SASKATCHEWAN RIVER AT HIGHWAY NO. 41

STATION NO. 05AK001

BED MATERIAL PARTICLE-SIZE ANALYSIS FOR 1967

DATE	TIME	PANEL DISCHARGE (M3/S)	SAMPLING VERTICAL (M)	TYPE OF SAMPLER	PERCENT FINER THAN INDICATED SIZE, IN MILLIMETRES													
					.004	.008	.016	.031	.062	.125	.250	.500	1.00	2.00	4.00	8.00	16.00	32.00	64.00
MAY 04	15:35			SCOOP	24	32	40	50	65	91	97	98	98	99	99	99	100		
MAY 04	15:45		160	LANE	NO MATERIAL COLLECTED														
MAY 04	15:55	31.8	134	LANE							3	99	99	100					
MAY 04	16:05	43.7	116	LANE							28	88	99	100					
MAY 04	16:15	41.0	94.5	LANE							22	98	100						
MAY 04	16:25	35.5	70.1	LANE							15	80	98	100					
MAY 04	16:35			SCOOP			8	12	18	36	69	76	78	80	81	84	91	100	
MAY 04	16:45			SCOOP	26	34	46	60	79	95	99	100							
MAY 13	10:45			SCOOP	18	20	28	41	60	85	94	95	96	96	96	96	98	100	
MAY 13	10:55	131	168	BM54					1	8	17	21	26	27	27	28	100		
MAY 13	11:05	145	140	BM54					4	20	44	96	100						
MAY 13	11:15	151	113	BM54							3	88	92	92	93	95	100		
MAY 13	11:25	136	88.4	BM54							5	79	93	95	95	98	100		
MAY 13	11:35	142	57.9	LANE						2	26	85	95	96	97	98	100		
MAY 13	11:45			SCOOP	27	33	44	58	74	95	100								
MAY 27	13:15			SCOOP	20	27	37	52	79	97	99	99	100						
MAY 27	13:20		54.9	BM54						1	5	11	12	13	18	30	58	100	
MAY 27	13:30		82.3	BM54					1	4	71	99	100						
MAY 27	13:35		113	BM54						1	2	7	16	26	43	70	93	100	
MAY 27	13:45		146	BM54	NO MATERIAL COLLECTED														
MAY 27	13:50		174	BM54					6	31	48	53	63	68	74	100			
MAY 27	14:00			SCOOP	17	24	35	53	80	97	99	99	100						
JUN 04	18:55			SCOOP	35	52	66	76	82	86	89	93	96	100					
JUN 04	19:00			SCOOP	6	21	28	40	70	90	98	100			8	9	10	46	100
JUN 04	19:05	235	183	LANE															
JUN 04	19:10	152	152	LANE	NO MATERIAL COLLECTED														
JUN 04	19:13	523	113	LANE											6	15	40	100	
JUN 04	19:18	438	79.2	LANE					1	1	4	41	47	53	60	72	84	86	100
JUN 04	19:22	278	42.7	LANE						1	14	52	54	54	55	55	61	100	
JUN 04	19:25			SCOOP	18	25	36	53	82	99	100								
JUN 04	19:30			SCOOP	14	18	26	38	70	90	98	100							

(CONTINUED)

SOUTH SASKATCHEWAN RIVER AT HIGHWAY NO. 41

STATION NO. 05AK001

(CONTINUED)

BED MATERIAL PARTICLE-SIZE ANALYSIS FOR 1967

DATE	TIME	PANEL DISCHARGE (M3/S)	SAMPLING VERTICAL (M)	TYPE OF SAMPLER	PERCENT FINER THAN INDICATED SIZE, IN MILLIMETRES														
					.004	.008	.016	.031	.062	.125	.250	.500	1.00	2.00	4.00	8.00	16.00	32.00	64.00
SEP 18	12:25			SCOOP	35	42	52	64	79	94	98	99	99	100					
SEP 18	12:30			SCOOP	15	18	20	31	56	90	97	98	99	100					
SEP 19	12:40		158	LANE	NO MATERIAL COLLECTED														
SEP 19	12:50		134	LANE						1	32	97	99	100					
SEP 19	13:00		116	LANE						1	43	98	100						
SEP 19	13:05		94.5	LANE						1	18	86	97	100					
SEP 19	13:10		70.1	LANE						1	24	82	98	100					
SEP 19	13:20			SCOOP			6	8	11	35	89	98	99	99	100				
SEP 19	13:30			SCOOP	8	9	11	20	37	87	100								
NOV 01	12:20			SCOOP	22	26	32	40	58	82	90	92	93	94	96	98	100		
NOV 01	12:30	14.4	155	LANE	NO MATERIAL COLLECTED														
NOV 01	12:40	17.6	134	LANE						2	44	94	98	99	100				
NOV 01	13:00	14.7	113	LANE						1	27	77	99	100					
NOV 01	13:10	13.3	94.5	LANE						1	13	39	40	42	46	54	70	100	
NOV 01	13:20	13.3	73.1	LANE						1	19	71	96	100					
NOV 01	13:30			SCOOP					2	5	20	26	26	27	28	30	48	100	

WATER SURVEY OF CANADA
AUG 22, 1989 PAGE 30
OTTAWA, ONT.

SOUTH SASKATCHEWAN RIVER AT HIGHWAY NO. 41

STATION NO. 05AK001

BED MATERIAL PARTICLE-SIZE ANALYSIS FOR 1968

DATE	TIME	PANEL DISCHARGE (M3/S)	SAMPLING VERTICAL (M)	TYPE OF SAMPLER	PERCENT FINER THAN INDICATED SIZE, IN MILLIMETRES													
					.004	.008	.016	.031	.062	.125	.250	.500	1.00	2.00	4.00	8.00	16.00	32.00	64.00
APR	10 18:00			SCOOP	17	21	28	35	49	64	70	71	72	73	80	82	84	100	
APR	10 18:10			SCOOP	23	26	32	40	55	75	81	82	83	84	91	92	93	100	
APR	10 18:20	14.0	157	LANE	24	34	46	55	66	83	98	99	100						
APR	10 18:30	20.5	134	BM54						1	40	78	80	81	83	89	100		
APR	10 18:40	19.1	116	BM54						1	42	95	100						
APR	10 18:50	17.4	96.0	BM54						2	63	97	99	99	99	100			
APR	10 19:00	19.0	73.1	BM54						1	16	69	98	100					
APR	10 19:10			SCOOP			10	12	16	24	32	35	36	36	37	39	63	100	
APR	10 19:20			SCOOP		10	14	19	28	54	76	78	78	78	79	79	82	100	
				SCOOP	23	29	36	45	60	83	90	91	92	92	92	92	93	100	
JUN	13 18:30			LANE	NO MATERIAL COLLECTED						1	17	54	70	78	80	99	100	
JUN	13 18:40	132	171	LANE							2	31	41	47	52	60	76	100	
JUN	13 18:50	158	140	LANE						1	16	78	90	93	94	96	98	100	
JUN	13 19:00	183	116	LANE						2	45	89	98	99	100				
JUN	13 19:10	166	85.3	LANE						94	100								
JUN	13 19:20	125	54.9	SCOOP	17	22	29	39	62	96	100								
JUN	13 19:30			SCOOP	10	13	16	20	50										
JUN	13 19:40																		
SEP	17 15:30	34.7	61.0	BM54						1	26	96	100						
SEP	17 15:40	43.0	91.4	BM54							40	97	100						
SEP	17 15:50	38.7	113	BM54						1	57	99	100						
SEP	17 16:00	42.6	131	BM54						1	77	96	97	98	99	100			
SEP	17 16:10	39.3	152	BM54	13	16	20	25	36	68	96	100							

SOUTH SASKATCHEWAN RIVER AT HIGHWAY NO. 41

STATION NO. 05AK001

BED MATERIAL PARTICLE-SIZE ANALYSIS FOR 1969

DATE	TIME	PANEL DISCHARGE (M3/S)	SAMPLING VERTICAL (M)	TYPE OF SAMPLER	PERCENT FINER THAN INDICATED SIZE, IN MILLIMETRES												
					.004	.008	.016	.031	.062	.125	.250	.500	1.00	2.00	4.00	8.00	16.00	32.00	64.00
APR 24	13:00			SCOOP	15	19	23	30	40	64	82	85	85	86	89	93	100		
APR 24	13:05	43.0	71.2	BM54						1	65	97	100						
APR 24	13:10	41.7	97.5	BM54						1	44	92	99	100					
APR 24	13:20	41.7	116	BM54						1	64	96	100						
APR 24	13:30	48.6	134	BM54						2	38	90	98	100					
APR 24	13:40	33.1	165	BM54		9	11	15	26	72	99	100							
APR 24	13:45			SCOOP	24	29	36	44	58	80	92	94	95	95	98	99	100		
JUN 03	16:50	94.5	165	BM54					1	18	81	100							
JUN 03	17:00	100	140	BM54	2	2	4	6	16	56	85	97	99	100					
JUN 03	17:10	103	116	BM54					1	9	40	91	96	100					
JUN 03	17:20	100	91.4	BM54						2	24	83	84	84	87	95	100		
JUN 03	17:30	101	61.0	BM54						2	24	97	100						
JUN 03	17:45			SCOOP	16	21	29	40	66	93	99	100							
JUL 03	15:45		42.7	BM54						1	47	100							
JUL 03	15:50	235	79.2	BM54						1	11	71	78	83	89	93	97	100	
JUL 03	15:55	407	112	BM54								1	2	3	6	27	90	100	
JUL 03	16:00	496	152	BM54			23	27	33	50	85	99	100						
JUL 03	16:05	394	183	BM54	NO MATERIAL COLLECTED														
JUL 03	16:10	212		SCOOP	24	31	38	49	69	91	98	99	100						
SEP 25	08:30		79.2	BM54						2	36	99	100						
SEP 25	08:35		97.5	BM54	NO MATERIAL COLLECTED														
SEP 25	08:45		116	BM54						1	28	97	100						
SEP 25	09:00		134	BM54						1	30	98	100						
SEP 25	10:00		168	BM54	10	11	13	16	26	71	88	100							

SOUTH SASKATCHEWAN RIVER AT HIGHWAY NO. 41 STATION NO. 05AK001

BED MATERIAL PARTICLE-SIZE ANALYSIS FOR 1970

DATE	TIME	PANEL DISCHARGE (M3/S)	SAMPLING VERTICAL (M)	TYPE OF SAMPLER	PERCENT FINER THAN INDICATED SIZE, IN MILLIMETRES													
					.004	.008	.016	.031	.062	.125	.250	.500	1.00	2.00	4.00	8.00	16.00	32.00 64.00
JUN 10	10:00		57.9	BM54						1	33	90	91	91	92	94	100	
JUN 10	10:05		85.3	BM54							15	97	100					
JUN 10	10:10		116	BM54							30	95	97	98	98	98	100	
JUN 10	10:15		146	BM54	NO MATERIAL COLLECTED													
JUN 10	10:20		165	BM54		14	19	26	30	39	68	96	98	99	100			
JUN 18	13:00			BM54						2	4	38	57	63	65	66	70	91 100
JUN 18	14:30	168	183	BM54	NO MATERIAL COLLECTED													
JUN 18	14:40	344	146	BM54						5	8	13	22	40	48	50	54	63 100
JUN 18	14:50	359	110	BM54								3	6	10	11	13	24	100
JUN 18	15:00	297	79.2	BM54							1	36	99	100				
JUN 18	15:10	196	48.8	BM54						1	8	99	100					

SOUTH SASKATCHEWAN RIVER AT HIGHWAY NO. 41 STATION NO. 05AK001

BED MATERIAL PARTICLE-SIZE ANALYSIS FOR 1971

DATE	TIME	PANEL DISCHARGE (M3/S)	SAMPLING VERTICAL (M)	TYPE OF SAMPLER		PERCENT FINER THAN INDICATED SIZE, IN MILLIMETRES											
						.004	.008	.016	.031	.062	.125	.250	.500	1.00	2.00	4.00	8.00	16.00	32.00	64.00
JUN 09	17:35	248	61.0	BMH60							2	45	98	98	98	98	98	100		
JUN 09	17:40	243	91.4	BMH60							3	54	100							
JUN 09	17:45	234	116	BMH60								2	32	58	66	71	80	94	100	
JUN 09	17:50	218	140	BMH60						1	4	14	35	46	60	70	81	96	100	
JUN 09	18:00	195	171	BMH60	NO MATERIAL COLLECTED															

SOUTH SASKATCHEWAN RIVER AT HIGHWAY NO. 41

STATION NO. 05AK001

BED MATERIAL PARTICLE-SIZE ANALYSIS FOR 1972

DATE	TIME	PANEL DISCHARGE (M3/S)	SAMPLING VERTICAL (M)	TYPE OF SAMPLER	PERCENT FINER THAN INDICATED SIZE, IN MILLIMETRES													
					.004	.008	.016	.031	.062	.125	.250	.500	1.00	2.00	4.00	8.00	16.00	32.00	64.00
JUN	22 13:40			SCOOP	29	40	52	65	84	95	98	99	99	99	100				
JUN	22 13:50		171	BMH60	NO MATERIAL COLLECTED														
JUN	22 14:00		140	BMH60					1	11	42	45	51	65	85	96	100		
JUN	22 14:05		116	BMH60						1	25	85	96	98	99	100			
JUN	22 14:10		91.4	BMH60						1	60	100							
JUN	22 14:20		61.0	BMH60						1	11	60	72	73	75	80	93	100	

SOUTH SASKATCHEWAN RIVER AT HIGHWAY NO. 41

STATION NO. 05AK001

BED MATERIAL PARTICLE-SIZE ANALYSIS FOR 1973

DATE	TIME	PANEL DISCHARGE (M3/S)	SAMPLING VERTICAL (M)	TYPE OF SAMPLER	PERCENT FINER THAN INDICATED SIZE, IN MILLIMETRES												
					.004	.008	.016	.031	.062	.125	.250	.500	1.00	2.00	4.00	8.00	16.00	32.00	64.00
SEP	25 10:45	8.60	152	BM54				10	17	40	94	99	100						
SEP	25 10:50	9.30	134	BM54						1	17	63	78	88	95	99	100		
SEP	25 10:55	10.1	116	BM54							52	97	100						
SEP	25 11:00	8.40	91.4	BM54						1	44	96	100						
SEP	25 11:05	7.40	73.2	BM54							24	80	99	100					

SOUTH SASKATCHEWAN RIVER AT HIGHWAY NO. 41

STATION NO. 05AK001

BED MATERIAL PARTICLE-SIZE ANALYSIS FOR 1974

DATE	TIME	PANEL DISCHARGE (M3/S)	SAMPLING VERTICAL (M)	TYPE OF SAMPLER	PERCENT FINER THAN INDICATED SIZE, IN MILLIMETRES													
					.004	.008	.016	.031	.062	.125	.250	.500	1.00	2.00	4.00	8.00	16.00	32.00	64.00
SEP 26	11:00			BMH60	17	21	26	36	73	95	98	99	99	100					
SEP 26	11:05	22.4	152	BMH60	13	15	19	21	30	63	99	99	100						
SEP 26	11:10	23.2	128	BMH60							27	99	100						
SEP 26	11:15	20.2	110	BMH60							22	97	100						
SEP 26	11:20	19.2	91.4	BMH60							21	89	99	100					
SEP 26	11:25	15.0	67.1	BMH60						1	9	30	36	37	42	62	100		
SEP 26	11:30			SCOOP	6	8	9	11	17	30	47	49	49	50	54	63	79	100	

SOUTH SASKATCHEWAN RIVER AT HIGHWAY NO. 41

STATION NO. 05AK001

BED MATERIAL PARTICLE-SIZE ANALYSIS FOR 1975

DATE	TIME	PANEL DISCHARGE (M3/S)	SAMPLING VERTICAL (M)	TYPE OF SAMPLER	PERCENT FINER THAN INDICATED SIZE, IN MILLIMETRES													
					.004	.008	.016	.031	.062	.125	.250	.500	1.00	2.00	4.00	8.00	16.00	32.00	64.00
SEP	30 12:00			BMH60	24	27	34	44	60	80	91	94	95	95	96	97	100		
SEP	30 12:05	26.4	70.1	BMH60					2	3	44	99	100						
SEP	30 12:10	29.7	94.4	BMH60					1	2	18	94	100						
SEP	30 12:15	29.0	113	BMH60					1	4	73	99	100						
SEP	30 12:20	34.3	131	BMH60					2	3	33	98	100						
SEP	30 12:25	30.7	155	BMH60	NO MATERIAL COLLECTED														
SEP	30 12:30			BMH60					1	3	21	52	55	56	62	76	90	100	

SOUTH SASKATCHEWAN RIVER AT HIGHWAY NO. 41

STATION NO. 05AK001

BED MATERIAL PARTICLE-SIZE ANALYSIS FOR 1978

DATE	TIME	PANEL DISCHARGE (M3/S)	SAMPLING VERTICAL (M)	TYPE OF SAMPLER	PERCENT FINER THAN INDICATED SIZE, IN MILLIMETRES													
					.004	.008	.016	.031	.062	.125	.250	.500	1.00	2.00	4.00	8.00	16.00	32.00 64.00
OCT 03	15:00			BMH60	6	8	10	13	16	21	30	45	58	62	67	93	100	
OCT 03	15:20	25.8	61.0	BMH60							15	93	100					
OCT 03	15:30	44.3	91.4	BMH60							14	91	98	99	100			
OCT 03	15:45	45.8	116	BMH60							19	98	100					
OCT 03	16:00	41.3	134	BMH60							18	99	99	100				
OCT 03	16:15	38.5	158	BMH60					1	4	39	82	96	100				

APPENDIX G

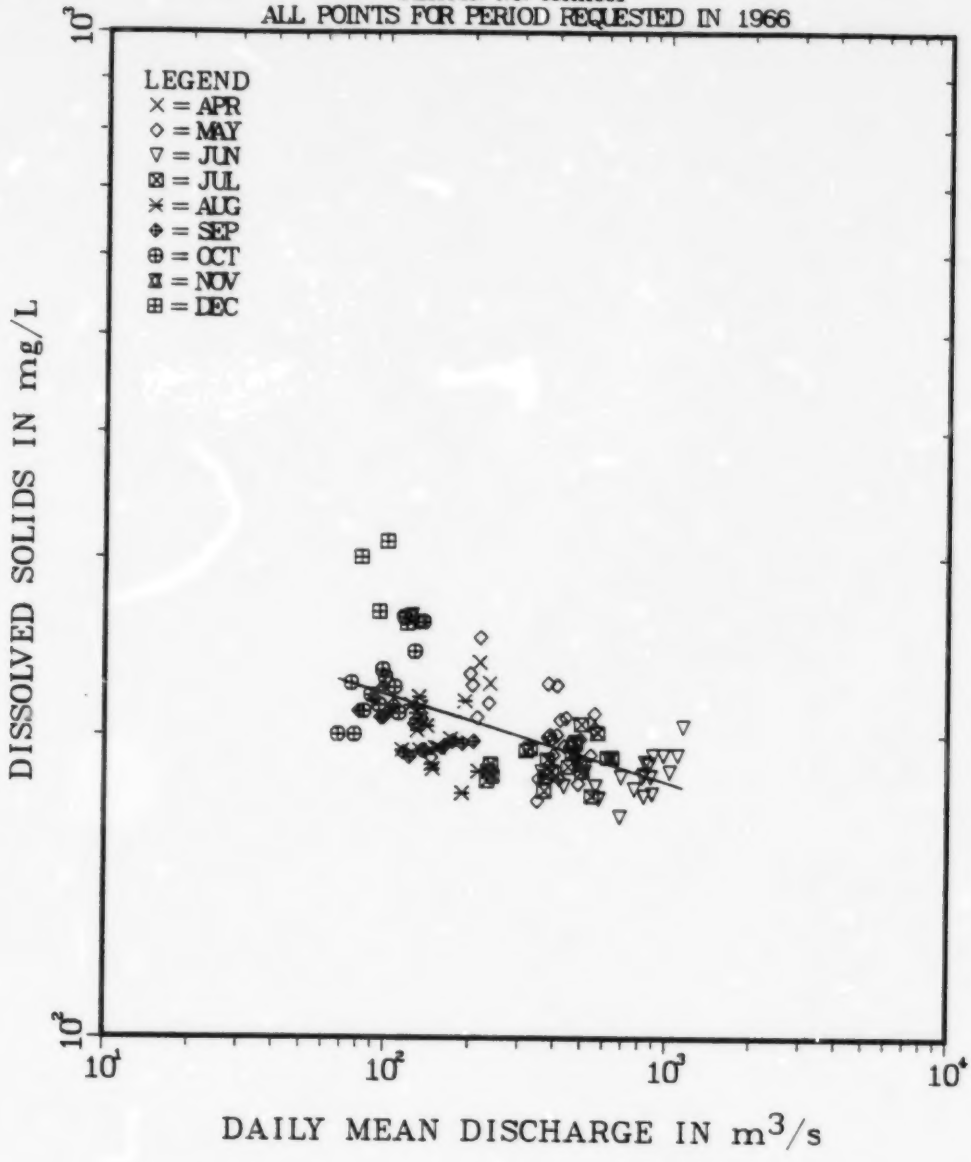
DISSOLVED SOLIDS DIAGRAMS

(Plots are not available for 1972, 1973, 1974, 1975 and 1976)

SOUTH SASKATCHEWAN RIVER AT HIGHWAY NO. 41

STATION NO. 05AK001

ALL POINTS FOR PERIOD REQUESTED IN 1966

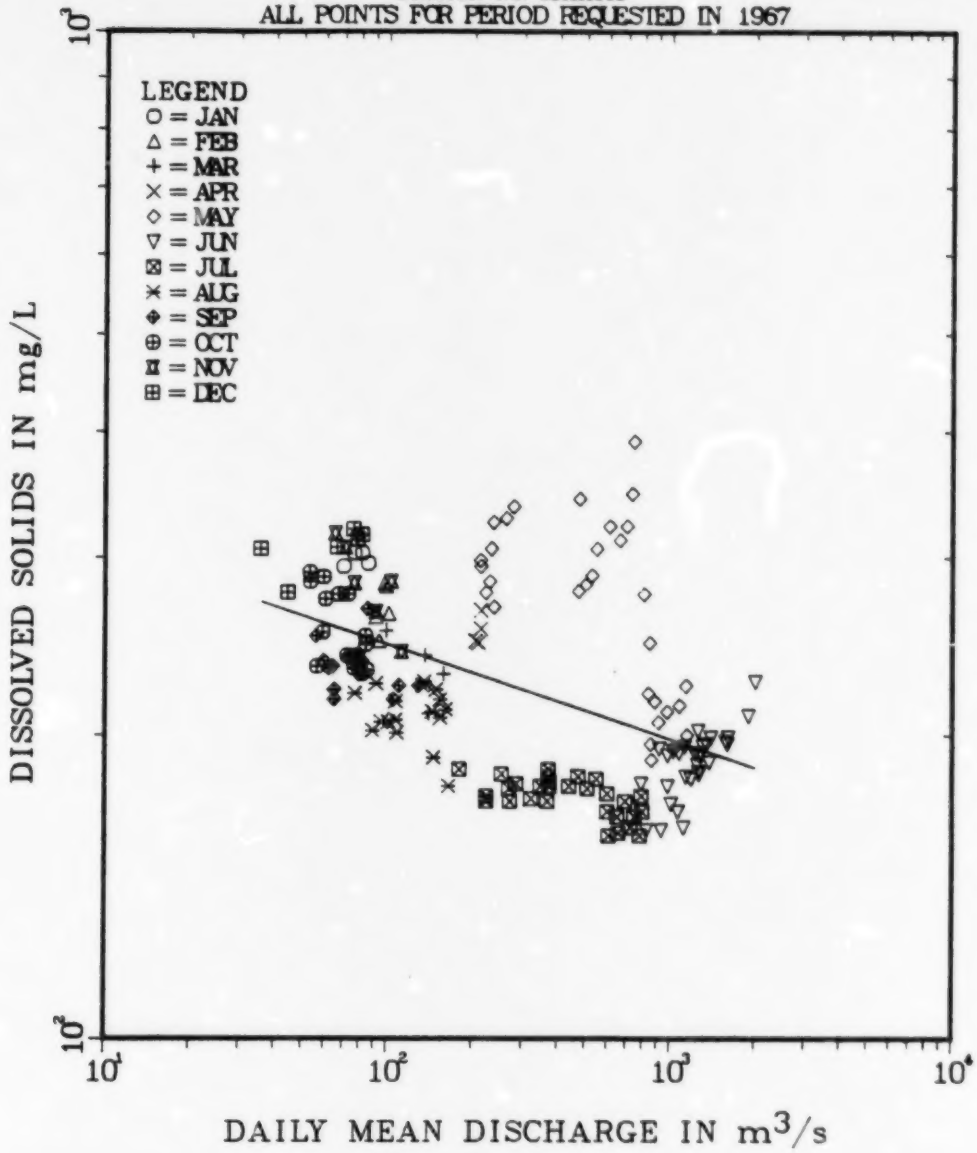


PLOT 1 98.98.98 EUT> 98 PR6, 2098 JOB= , SOLAR ENERGY DISSPLA VER 8.2

SOUTH SASKATCHEWAN RIVER AT HIGHWAY NO. 41

STATION NO. 05AK001

ALL POINTS FOR PERIOD REQUESTED IN 1967

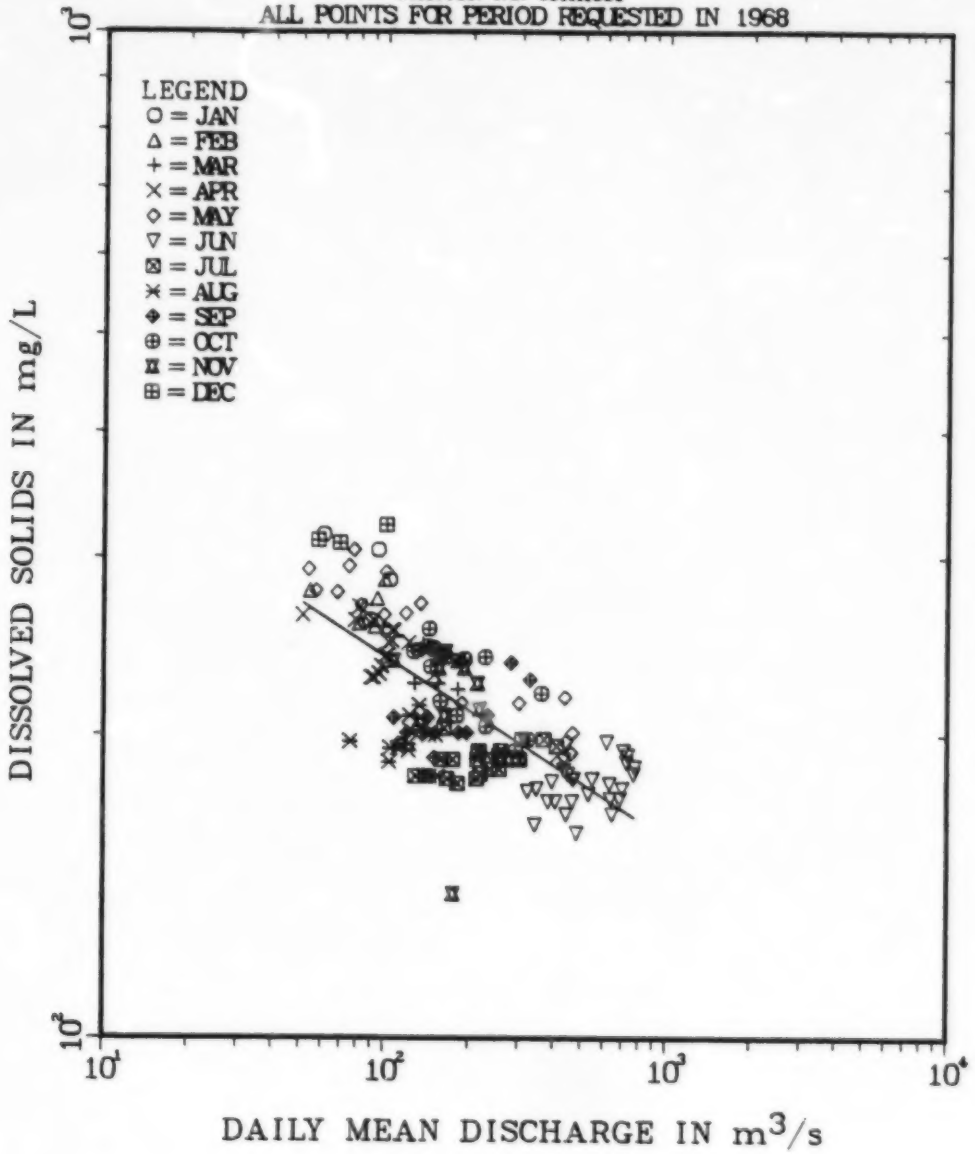


, SOLAR ENERGY DISSPLA VER 8.2
30.30.30 [illegible] 30 FEB, 2038 JOB-

SOUTH SASKATCHEWAN RIVER AT HIGHWAY NO. 41

STATION NO. 05AK001

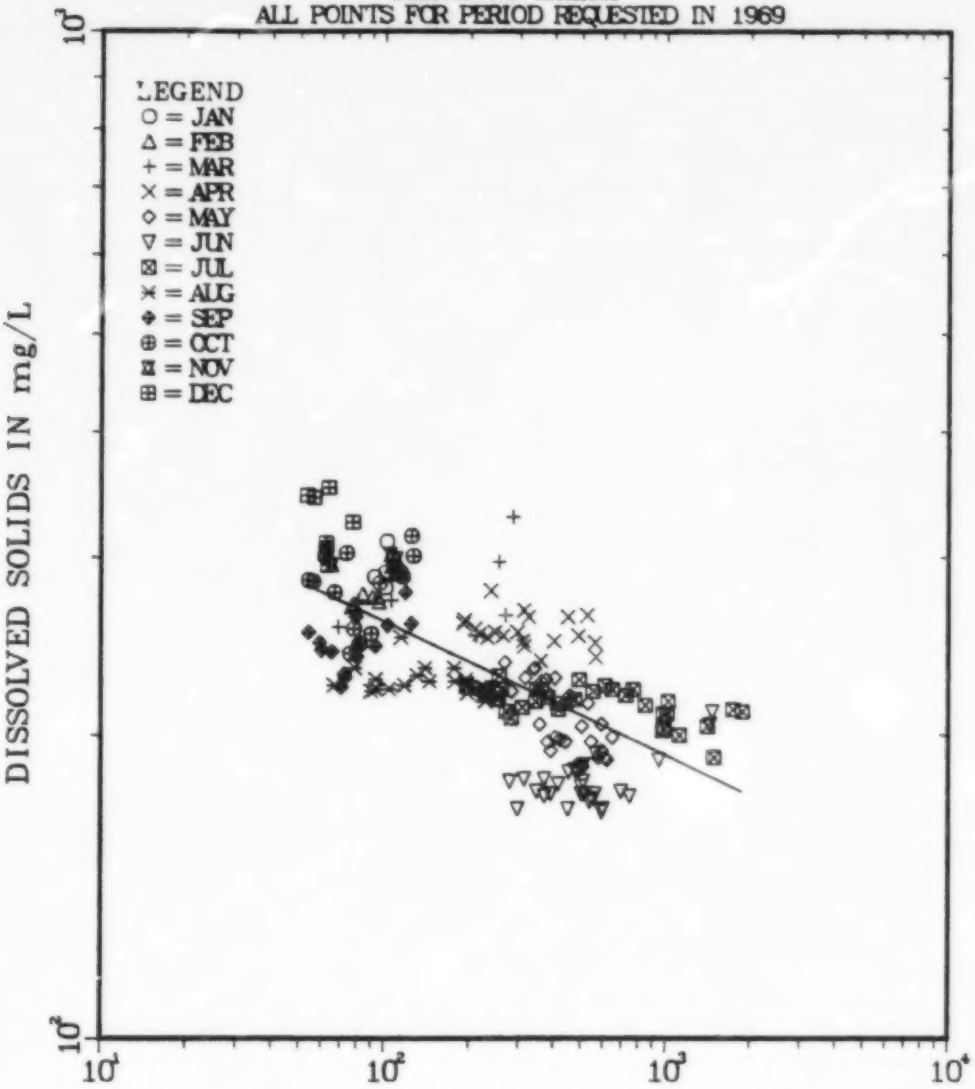
ALL POINTS FOR PERIOD REQUESTED IN 1968



SOUTH SASKATCHEWAN RIVER AT HIGHWAY NO. 41

STATION NO. 05AK001

ALL POINTS FOR PERIOD REQUESTED IN 1969

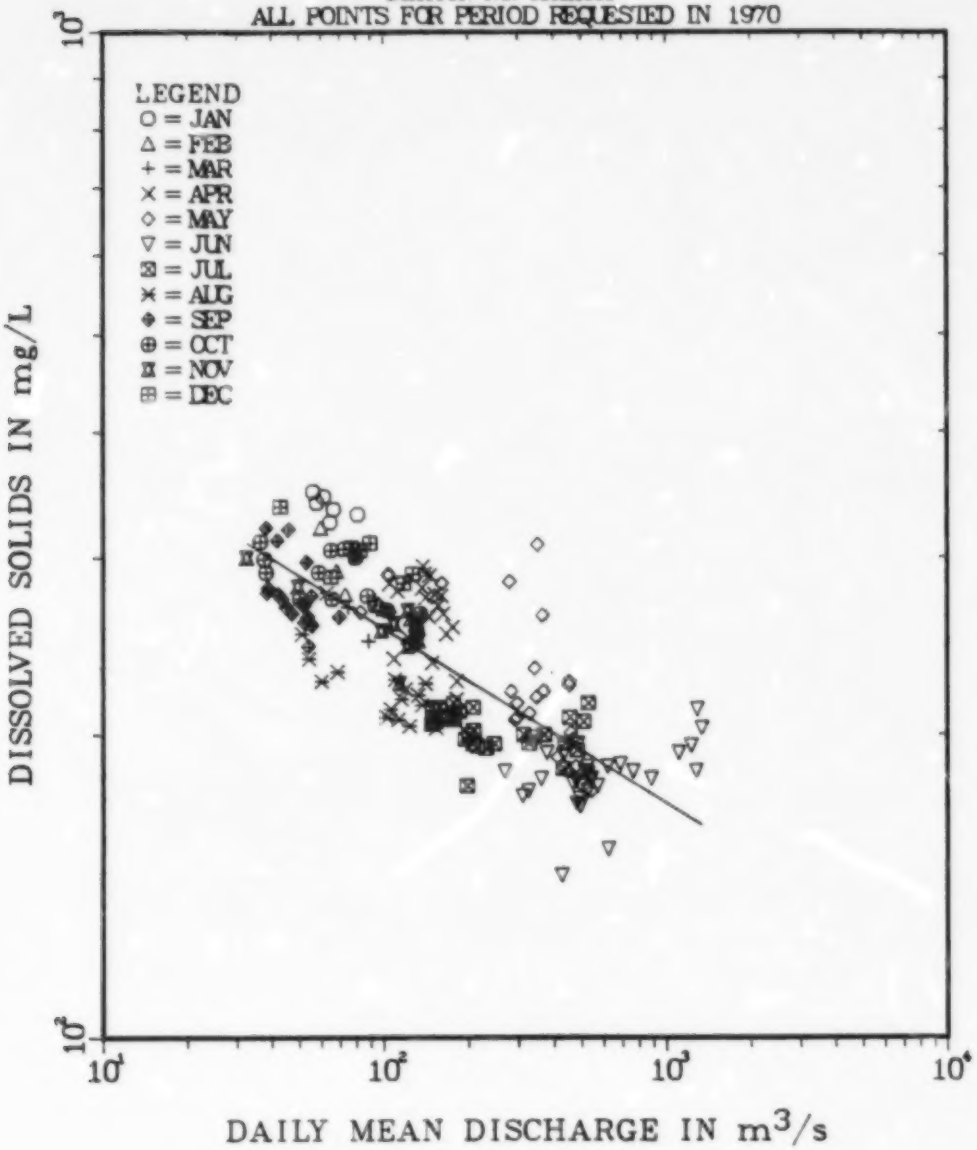


PLOT 1 98.06.08 EDT> 98 FEB, 2098 JOB- , SOLAR ENERGY DISSPLA VER 8.2

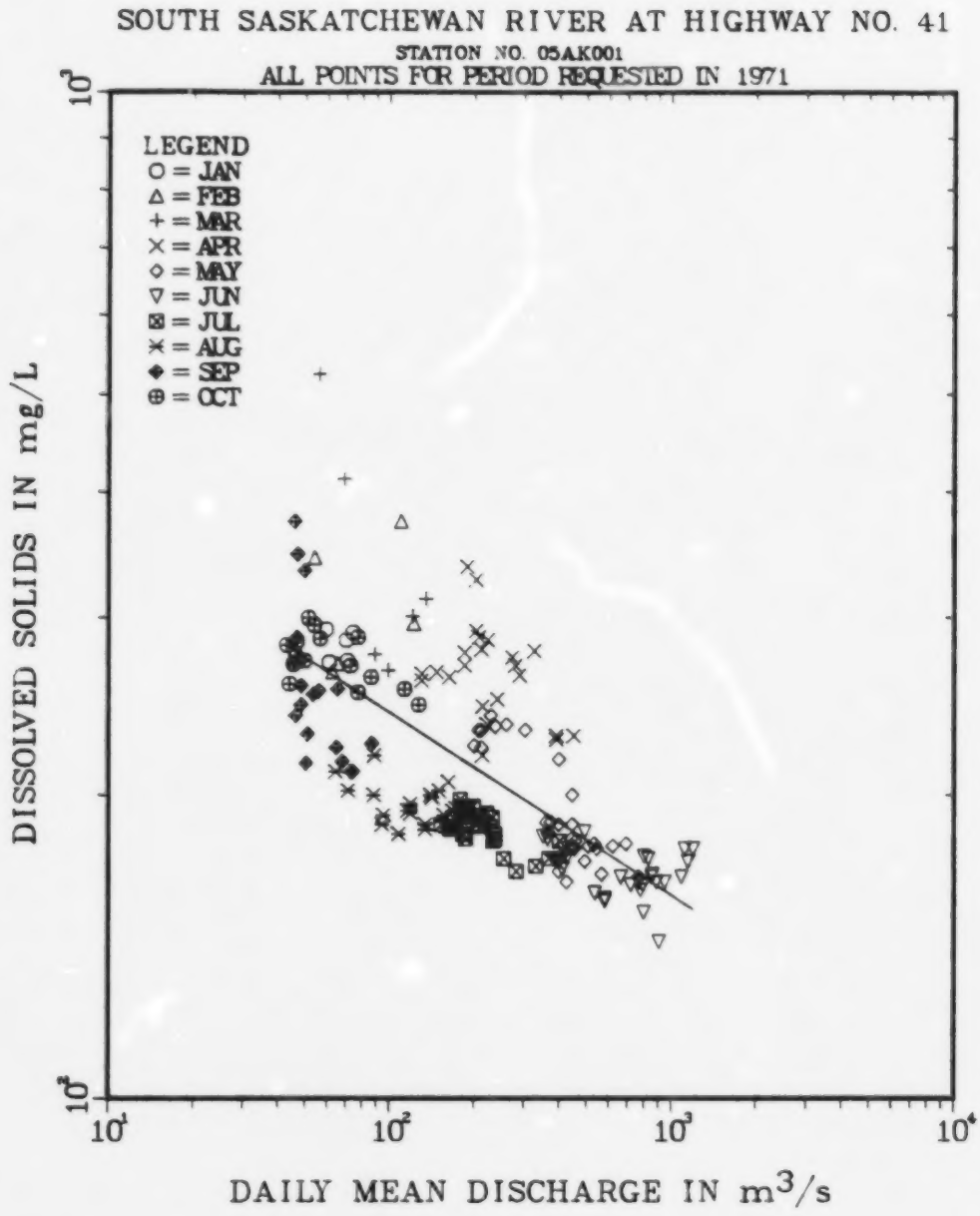
SOUTH SASKATCHEWAN RIVER AT HIGHWAY NO. 41

STATION NO. 05AK001

ALL POINTS FOR PERIOD REQUESTED IN 1970



PLOT 3 96.98.98 LUI> 98 FEB, 2098 JOB= , SOLAR ENERGY DISSPLA VER 8.2

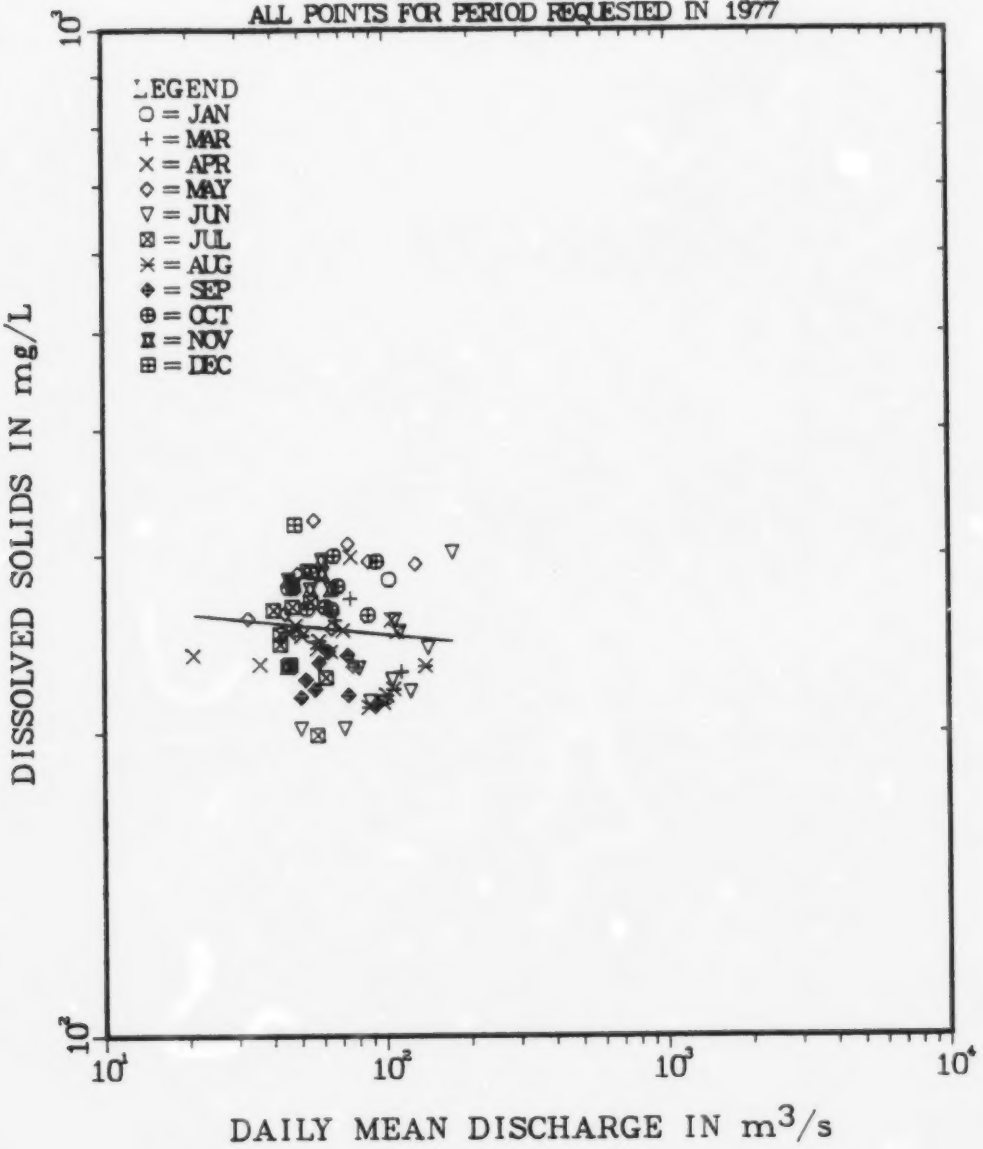


PLOT 6 90.98.98 EUT> 90 FRG, 2098 JOB- , SOLAR ENERGY DISSPLA VER 8.2

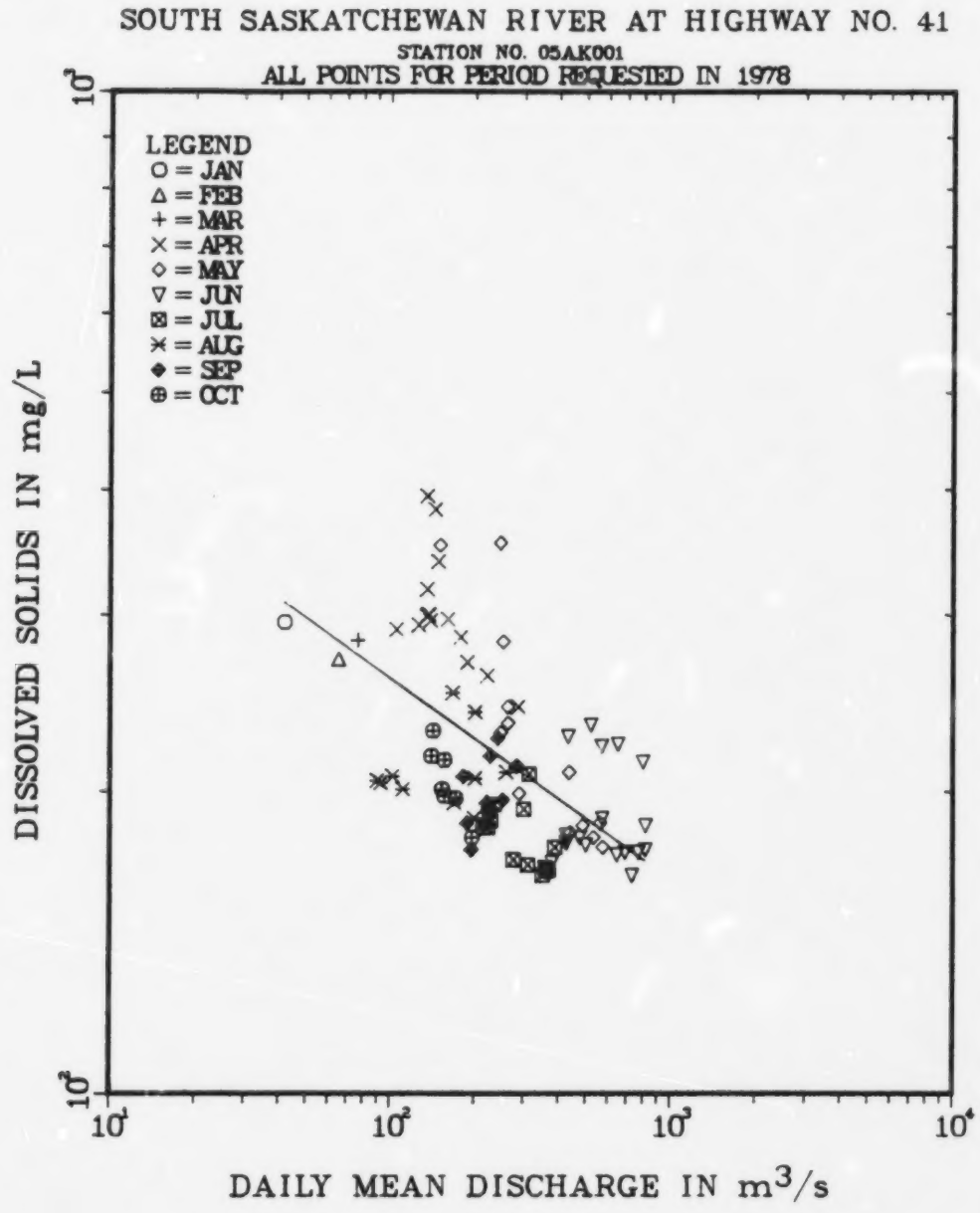
SOUTH SASKATCHEWAN RIVER AT HIGHWAY NO. 41

STATION NO. 05AK001

ALL POINTS FOR PERIOD REQUESTED IN 1977



RUN / 30.30.98 LU1> 98 FEB, 2098 JOB- , SOLINK ENERGY DISSPLA VER 8.2

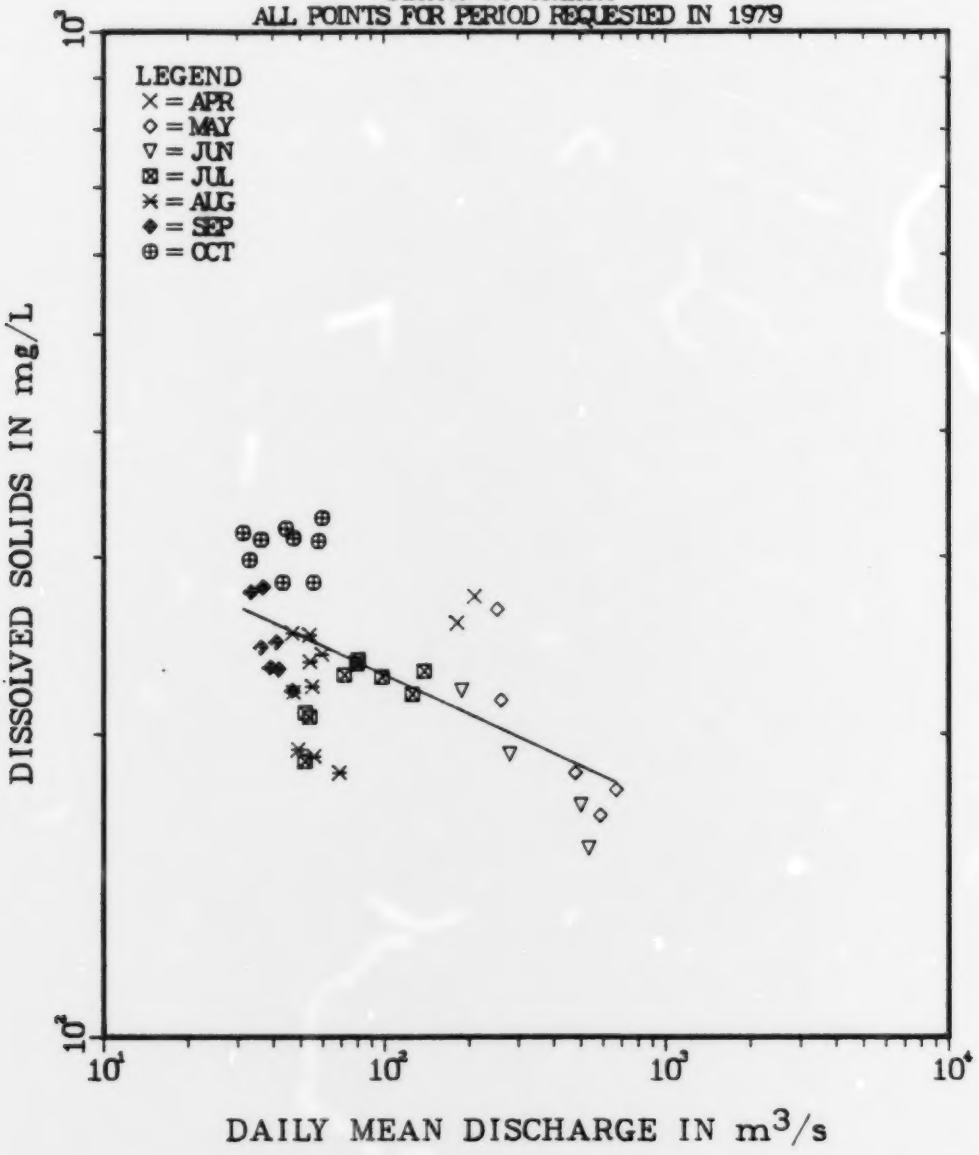


PLOT 8 98.98.98 EUT> 98 PR6, 2098 JOB- , SOLAR ENERGY DISSPLA VER 8.2

SOUTH SASKATCHEWAN RIVER AT HIGHWAY NO. 41

STATION NO. 05AK001

ALL POINTS FOR PERIOD REQUESTED IN 1979

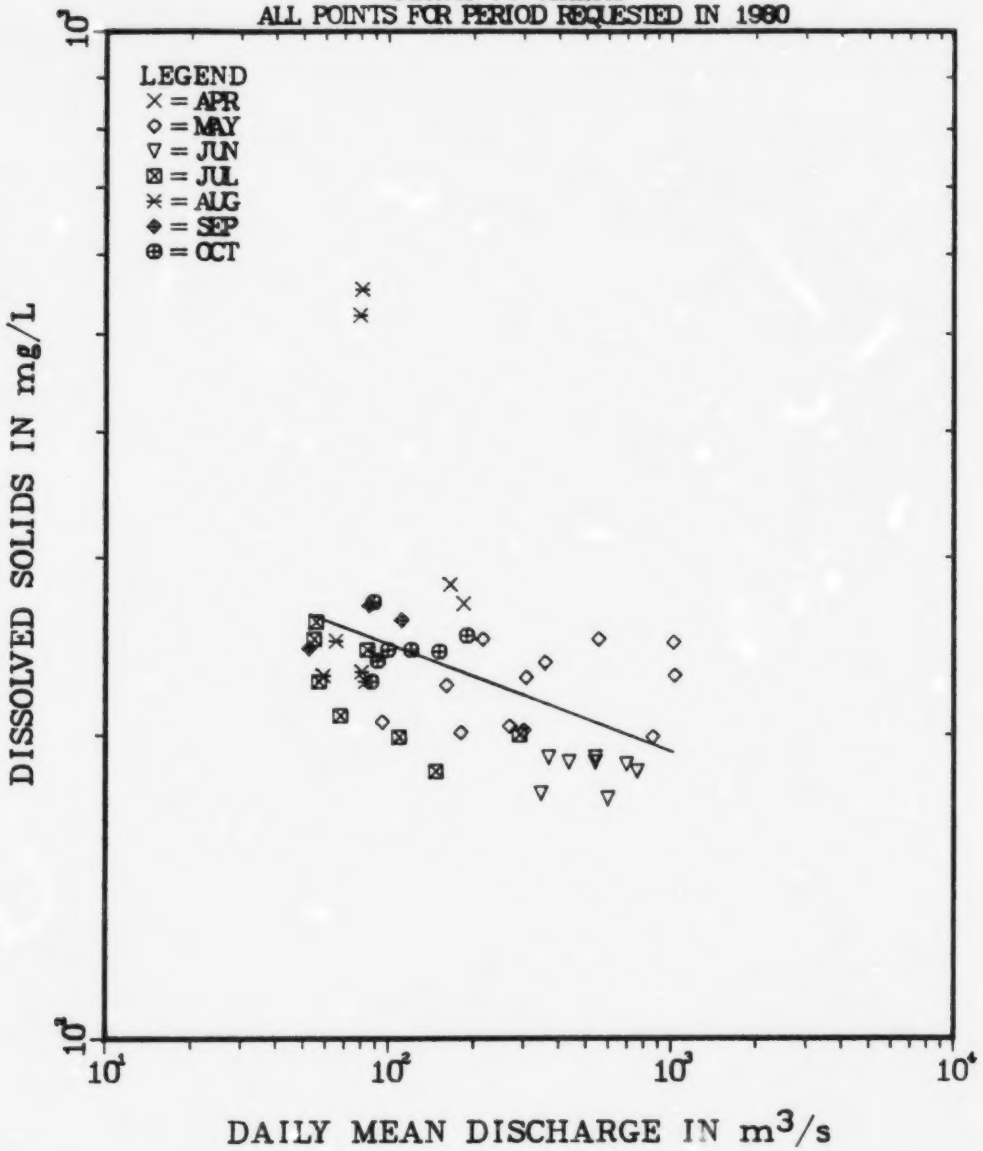


PLOT 9 90.90.90 EUT> 90 FRG, 2090 JOB- , SOLAR ENERGY DISSPLA VER 8.2

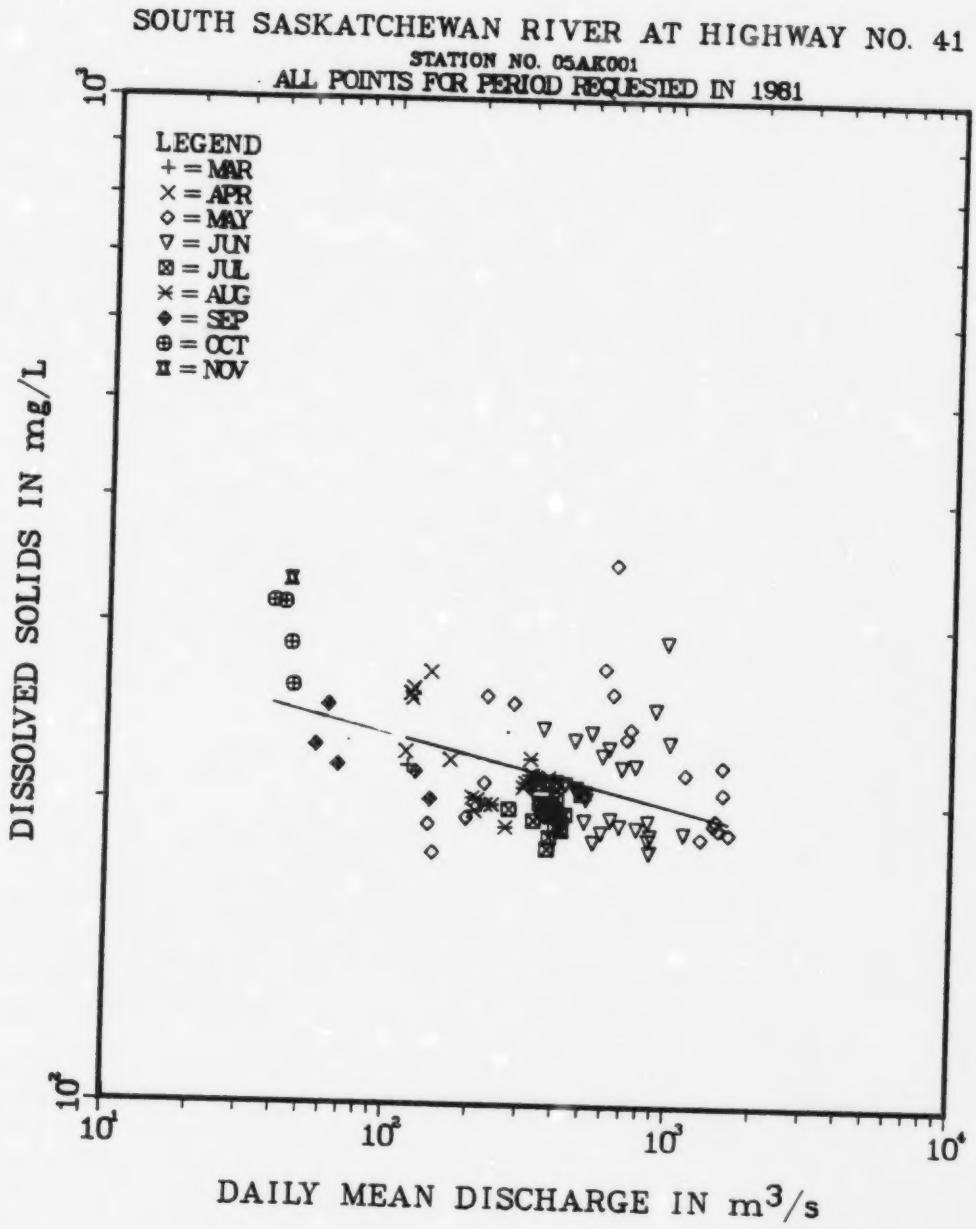
SOUTH SASKATCHEWAN RIVER AT HIGHWAY NO. 41

STATION NO. 05AK001

ALL POINTS FOR PERIOD REQUESTED IN 1980



PLOT 10 96.98.98 EUT> 98 PR6, 2098 JOB- SOLAR ENERGY DISSPLA VER 8.2

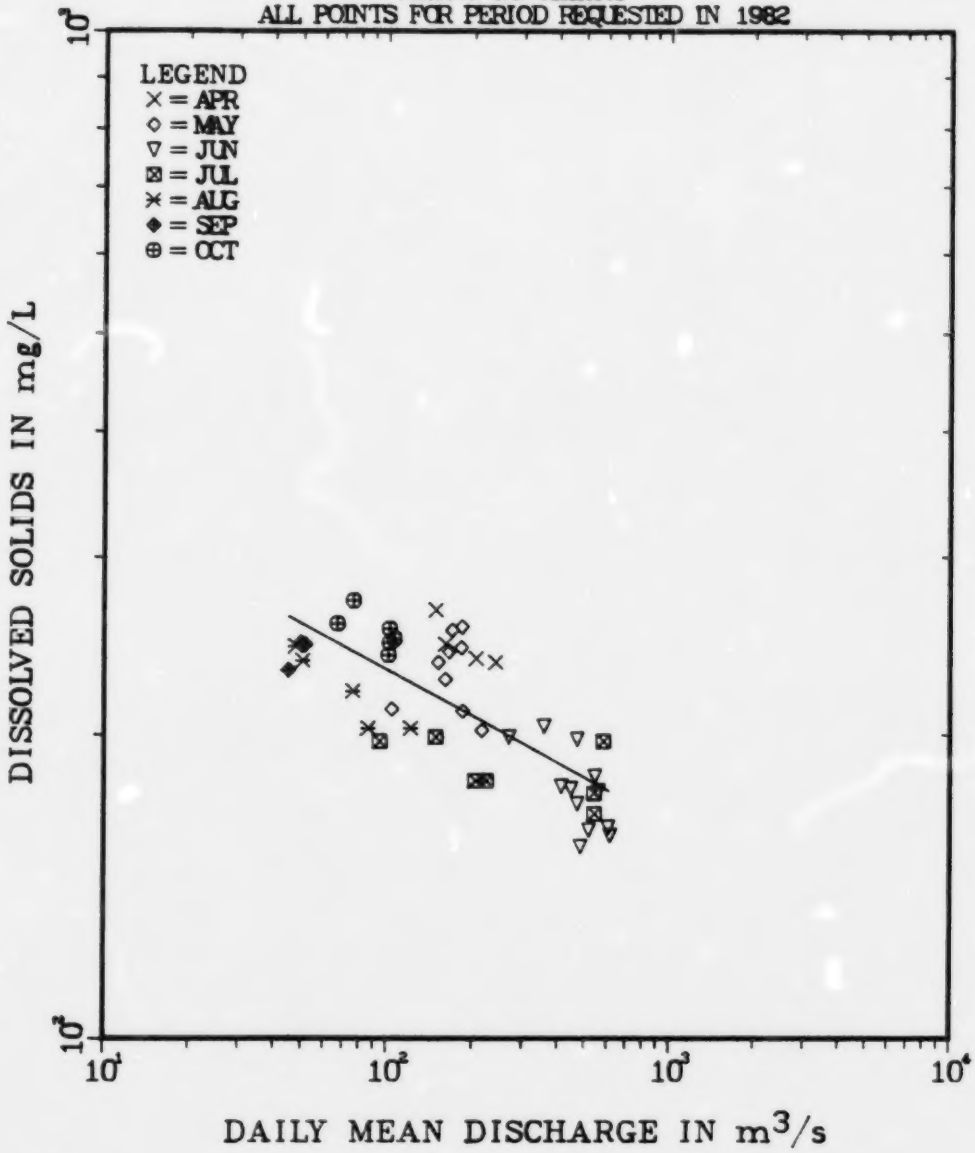


PLOT 11 30.30.98 LUIS 98 PR6, 2098 JOB- , SOLAR ENERGY UISSPLA VER 8.2

SOUTH SASKATCHEWAN RIVER AT HIGHWAY NO. 41

STATION NO. 05AK001

ALL POINTS FOR PERIOD REQUESTED IN 1982



PLOT 12 98.98.98 EUT> 98 PR6, 2098 JOB- , SOLAR ENERGY DISSPLA VER 8.2

APPENDIX H

PHOTOGRAPHS

Photographs showing bed material sampling

300 metres above the gauge.

List of Photographs

Photo 1: Gauge shelter and catamaran cable tower

Photo 2: Measuring cross section looking from right to left bank

Photo 3: Surface Bed Material sampling. Line on Point Bar, right bank, 300 metres above gauge

Photo 4: Surface Bed Material Sampling. Line on Point Bar, right bank, 300 metres above gauge

Photo 5: Bulk Sampling from Point Bar, right bank, 300 metres above gauge

Photo 6: Bulk Sampling from Point Bar, right bank, 300 metres above gauge

Photo 1. Gauge Shelter and Catamaran cable tower.

Photo 2. Measurement cross section looking from right to left bank.

Photo 3. Surface Bed Material sampling. Line on Point Bar, right bank, 300 metres above gauge.

Photo 4. Surface Bed Material sampling. Line on Point Bar, right bank, 300 metres above gauge.

Photo 5. Bulk Sampling from Point Bar, right bank, 300 metres above gauge.

Photo 6. Bulk Sample from Point Bar, right bank, 300 metres above gauge.